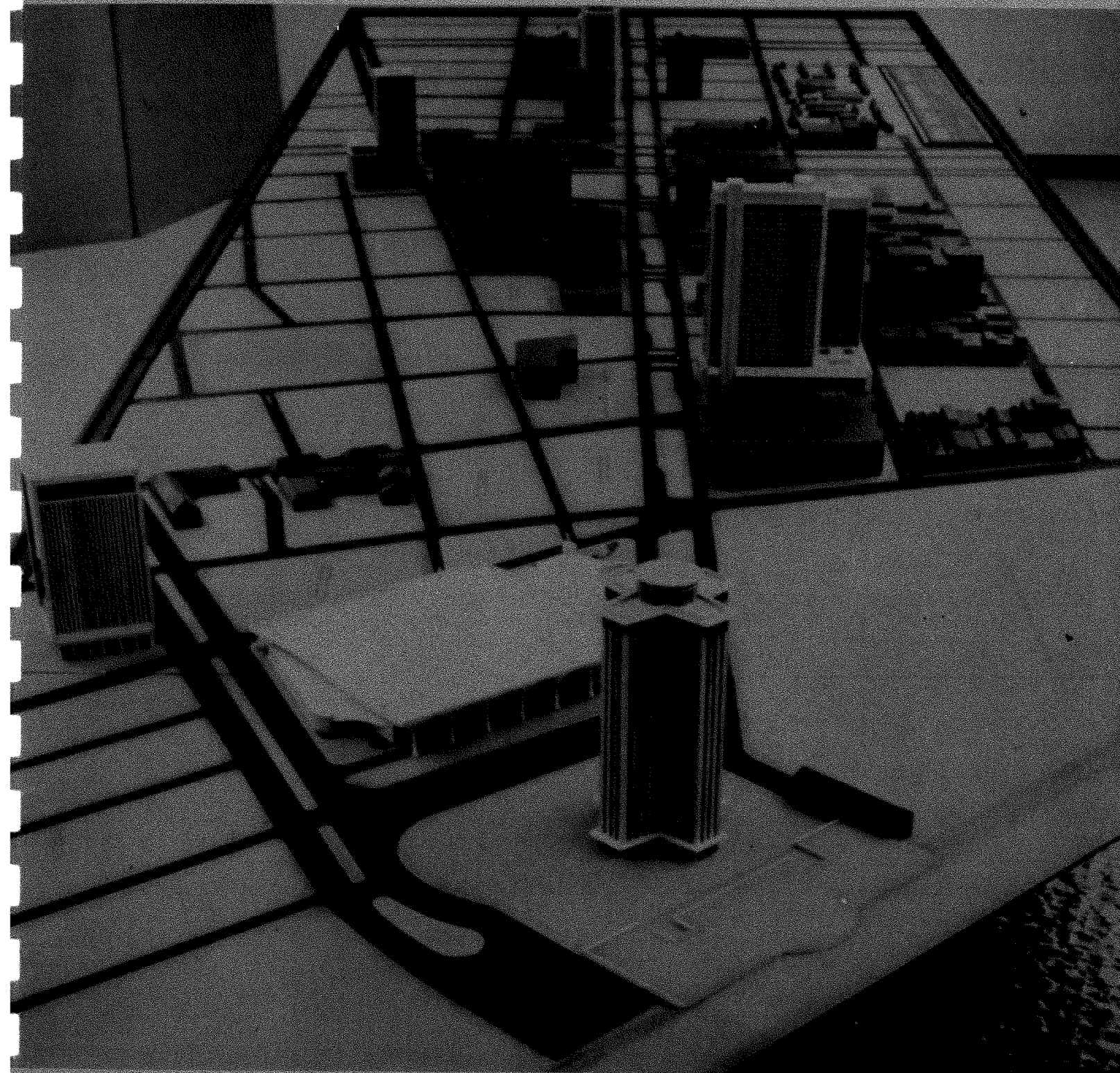


CANAL STREET IMPROVEMENT PROJECT



PREPARED FOR THE NEW ORLEANS CENTRAL AREA COUNCIL
CHAMBER OF COMMERCE OF THE NEW ORLEANS AREA

by

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TABLE OF CONTENTS

	<u>Page</u>
Introduction & Purpose	1
Area Development	3
A. Area "A".	9
B. Area "B".	11
C. Area "C".	13
D. Area "D".	15
E. Area "E".	16
F. Area "F".	19
G. Area "G".	20
Environmental Quality.	22
Transportation	25
A. Mass Transportation	28
B. Central Business District Traffic	32
C. Parking	46
Conclusions & Recommendations.	50
Vieux Carre Transit Occupancy Study.	53
Appendix B	57

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
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91
92
93
94
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96
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98
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100

CANAL STREET IMPROVEMENT PROJECT

INTRODUCTION

Many large cities throughout the United States have awakened to the realization that the Central Business District (CBD) in many of these cities is in a state of decline. The relative decline in retail sales, the mounting congestion of traffic arteries, the steady decline in the use of public transportation, and the growing obsolescence of CBD buildings and activities are problems common to every major metropolitan area in the United States.

Some of these cities have embarked on ambitious and far-sighted renewal and redevelopment programs aimed at restoring the strength and vitality of the CBD. Those programs which have succeeded and are succeeding are founded on a firm base of cooperation and teamwork between property owner, businessman, public official, and citizen. The success of this project as a part of a general central area redevelopment program depends upon establishing a spirit of cooperation and teamwork within this community.

"Guidelines for Growth in Central New Orleans," prepared for the New Orleans Central Area Council by Barton-Aschman Associates, Inc., outlined a program for the overall development of the New Orleans Central Business District. Within this program a task force was established whose purpose was "to cause to be made a detailed Master Plan for the development and improvement of Canal Street."

In January, 1967, the Department of Civil Engineering was requested to undertake the preparation of such a plan. The outcome of the study was to consist of essentially three elements. First was a written report describing the recommendations and conclusions of the study. Second was the preparation of drawings and maps detailing the various alternatives. And third was the construction of a scale model of the study area.

The purpose of this report is to discuss the problems which exist within the Canal Street area and to suggest solutions to those problems. The report is structured into two parts. First is a discussion of the existing development within the area and a suggested strategy for redevelopment. Included in this part are suggestions for improving the general environmental conditions within the area. The second part deals with transportation and offers suggested alternative designs for the Canal Street area.

This study included considerations of the following:

- a) A study of the existing use of property within the study area and an analysis of its potential for improvement or redevelopment.
- b) A study of the existing transportation system including use of the sidewalks and curb lanes.
- c) A survey of curb space use was conducted.
- d) A pedestrian count was made at all major Canal Street intersections.
- e) Vehicular traffic counts were made at all major intersections.
- f) A transit occupancy study was made on bus routes traversing the Vieux Carre.
- g) A photographic study was made of desirable and undesirable features within the study area.

Reports reviewed in connection with this study include:

- a) Guidelines for Growth in Central New Orleans
Barton-Aschman Associates, Inc.
- b) Economic Survey and Market Analysis of the New Orleans Central Area, 1959
Real Estate Research Corporation
- c) Economic Survey and Market Analysis of the New Orleans Central Area, 1968
Real Estate Research Corporation
- d) A Traffic Improvement Plan for Canal Street
Wilbur Smith and Associates
- e) New Orleans Metropolitan Area Transportation Study, Volumes I & II
Louisiana Department of Highways
- f) Central Business District - Cordon Traffic Study
New Orleans Public Service, Inc.

Renderings for the study and the scale model were prepared by Mr. Ronald Alpha and Mr. Russell Burgdahl, two recent graduates of the School of Architecture, Tulane University. The authors of this report wish to express their appreciation to the excellent work done by these two individuals.

In addition, the authors wish to express their appreciation to the many students of the Department of Civil Engineering who contributed in various ways to the outcome of this study.

PART I

AREA DEVELOPMENT



AREA DEVELOPMENT

The strategy for redevelopment along Canal Street must be something more than a simple redecoration of building facades or the renovation of existing buildings. The continued health of the CBD retail activity which is centered along Canal Street depends upon a revitalization program which includes substantial Central Area apartment, hotel and office building construction. Maximizing the accessibility of the working and resident populations of the Central Area to these shopping facilities could be accomplished by the construction of multi-use buildings along Canal Street. Different mixtures of uses in these buildings would be appropriate in certain areas along Canal Street. In the area from Chartres-Camp Streets to the river (Development Areas A, B, and C) mixtures of hotel, office, and retail space would be appropriate. This type of construction is already being undertaken in the Marriott Complex in Block 16 between Chartres and Dorsiere Sts. In Development Areas D and E, the predominant mixture of uses would be office and retail space. And in Development Areas F and G multi-use buildings could contain apartment, office, and retail space.

The ability of Canal Street to compete in the location market of new office, retail, hotel, and apartment space depends upon a variety of factors. Chief among these, in general terms, are the following.

1. A clearly defined market for the type of space considered.
2. The ability to assemble land at competitive prices.
3. The availability of investment capital at interest rates which would make the venture profitable.
4. Location of the space relative to similar or related activities.
5. Advantages of the location in terms of accessibility to all modes of transportation.
6. Prestige factors associated with particular locations.

The Economic Survey and Market Analysis of the New Orleans Area forecasts space needs in various categories to 1980 which are summarized below.

SUMMARY OF CENTRAL AREA MARKET FORECASTS OF OFFICE, RETAIL, HOTEL, AND APARTMENT SPACE NEEDS

<u>Office</u>	A net rentable area of 2,160,000 sq. ft. and a gross building area of 2,880,000 sq. ft.
<u>Hotel-Motel</u>	A total of 5,600 transient rooms.
<u>Retail</u>	No net additional retail space required, but substantial renovation and conversion of existing space.
<u>Apartment</u>	A total of 3,640 units.

Since the Economic Survey was published in May 1968, the following major office buildings have been proposed or are under construction.

1010 Common Building	500,000 sq. ft.
One Shell Square	1,600,000 sq. ft.
Marriott Hotel-Office Complex	500,000 sq. ft.
300 Poydras Building	337,000 sq. ft.
Chamber of Commerce Building	<u>50,000 sq. ft.</u>
Total	2,987,000 sq. ft.

This total of 2,987,000 sq. ft. of office space either proposed or under construction exceeds the forecasted office space needs to 1980 by 107,000 sq. ft. This would indicate an apparent satisfaction of the office space requirements for this period. However, several questions require consideration before this assumption can be justified on the basis of the Economic Survey. The method of analysis used in developing the forecasts of the market for CBD office space is based essentially on four historical trends.

1. Past Rate of Absorption based upon building permit data.
2. Past Rate of Absorption based upon space constructed and occupied.
3. Office Space Related to Metropolitan Area Population.
4. Office Space Related to Office Employment.

The accuracy of these forecasts depends upon the reaction of these trends to a number of future events with varying degrees of predictability. Among these events are the following:

- 1) The rapid rate of new office construction. Will this rapid increase in the construction of new office space increase the rate at which existing office space becomes economically and functionally obsolete? The Economic Survey concluded, "an active program of new office construction will accelerate the obsolescence of the older, marginal office buildings." And as a result "it is expected that the replacement of existing office space will create a market in the central business district for an average of some 50,000 square feet of net rentable area per year." However, this figure appears to be nothing more than a vague estimate which could vary considerably.
- 2) A vigorous program of investment and expansion in business and industry. How would the absorption rate of office space react to such a program?

Certainly, if existing businesses and industries expand their operations there will be a corresponding increase in the demand for office space. And similarly, a program to attract new businesses into the metropolitan area will also increase the need for new office space. The recent investments to increase the efficiency and capabilities of the Port are one example of such a program. On the negative side are the steadily increasing prime interest rates and the attempts to control an inflationary economy by discouraging expansionary moves.

- 3) The increasing reality of the Dome Stadium with all of its related activities. There has been no clear definition of what effect the Dome Stadium, with its tremendous sports, entertainment, and convention capabilities, will have on the central business district. There will undoubtedly be new businesses created to service the giant complex and its related activities, along with hotels, apartments, and parking structures, but, as yet, the scale of these generated activities is not apparent.
- 4) Improvements in the accessibility to the central business district. Any changes in the transportation system which improves access to the central business district strengthens its attractiveness for the location of new business. However the decision to cancel the Riverfront Expressway and proceed with the Outer Belt Dixie Freeway has dealt a double blow to the efforts to improve the accessibility to the central business district. First, it has fatally disrupted the ring system of access to the CBD. All traffic must now enter the CBD from the northern and western ramps of the completed expressway system which were not designed to take this full load. And second, the construction of a high-capacity highway through practically undeveloped land creates the opportunity for the dispersion of business and retail activities to outlying areas away from the CBD in a similar fashion to what occurred along Boston's Route 128 and along the Beltways around Baltimore and Washington, D. C. While this may not necessarily be undesirable its timing in relation to CBD development may be unfortunate.

While the Economic Survey and Market Analysis called for no net additional retail space requirement, it is felt that the approach to renovation and conversion of existing space holds the key to the successful revitalization of the Canal Street Area is that of land assembly for building sites. For many years the fragmentation of ownership of property

together with high real estate values, zoning restrictions, assessment practices which discouraged the improvement of property, and a weak market for office, retail, and hotel space have made development along Canal Street relatively inactive. That development which did take place gravitated to other areas which posed fewer problems to the developer, or in the case of retail space reacted to well-recognized changes in shopping patterns which gave rise to the development of regional shopping centers.

A point has been reached where it has become extremely important to break out of these restraints so that Canal Street can be equally competitive for development with other areas of the central core. In the competition for the location of office space, the Canal Street area has clearly not fared well. Of the almost three million square feet of new office space proposed or under construction, only the 500,000 sq. ft. in the office tower of the Marriott Complex is located on Canal Street.

For two reasons, it is recommended that the properties along Canal Street should be more intensely developed. First, because Canal Street is the focus of the public transportation system, it would tend to encourage the use of this mode of travel for the very important journey-to-work. Second, the location of office and hotel structures above the retail establishments along Canal Street would bring the principal customer of these stores, the worker, closer to the merchandise.

In order to bring about the more intense development of Canal Street, this development must be carried out at as large a scale as possible. Ideally, an entire block should be developed as a unit. Half-block and quarter-block scale would be acceptable where some existing structures are still in good condition; however, less than quarter-block development should be discouraged if at all possible in favor of larger projects.

There are many reasons why large-scale development is more desirable than uncoordinated small-scale development. Among them are the following.

1. It maximizes the utilization of space within the requirements of the proposed zoning regulations. In order to attain the maximum permitted floor area ratio (FAR), it is necessary to adhere to certain setback requirements for that portion of the building above 100 feet. Construction above 100 feet would be impractical on many of the narrow parcels of property along Canal Street.

2. Although size, by itself, is not the only key to effective architecture, it does permit a unity of design which frequently cannot be obtained when each small land parcel is developed individually.
3. It provides greater flexibility toward the solution of some of the persistent central area problems, particularly those related to truck service, better pedestrian movement, and more efficient ground floor space utilization.

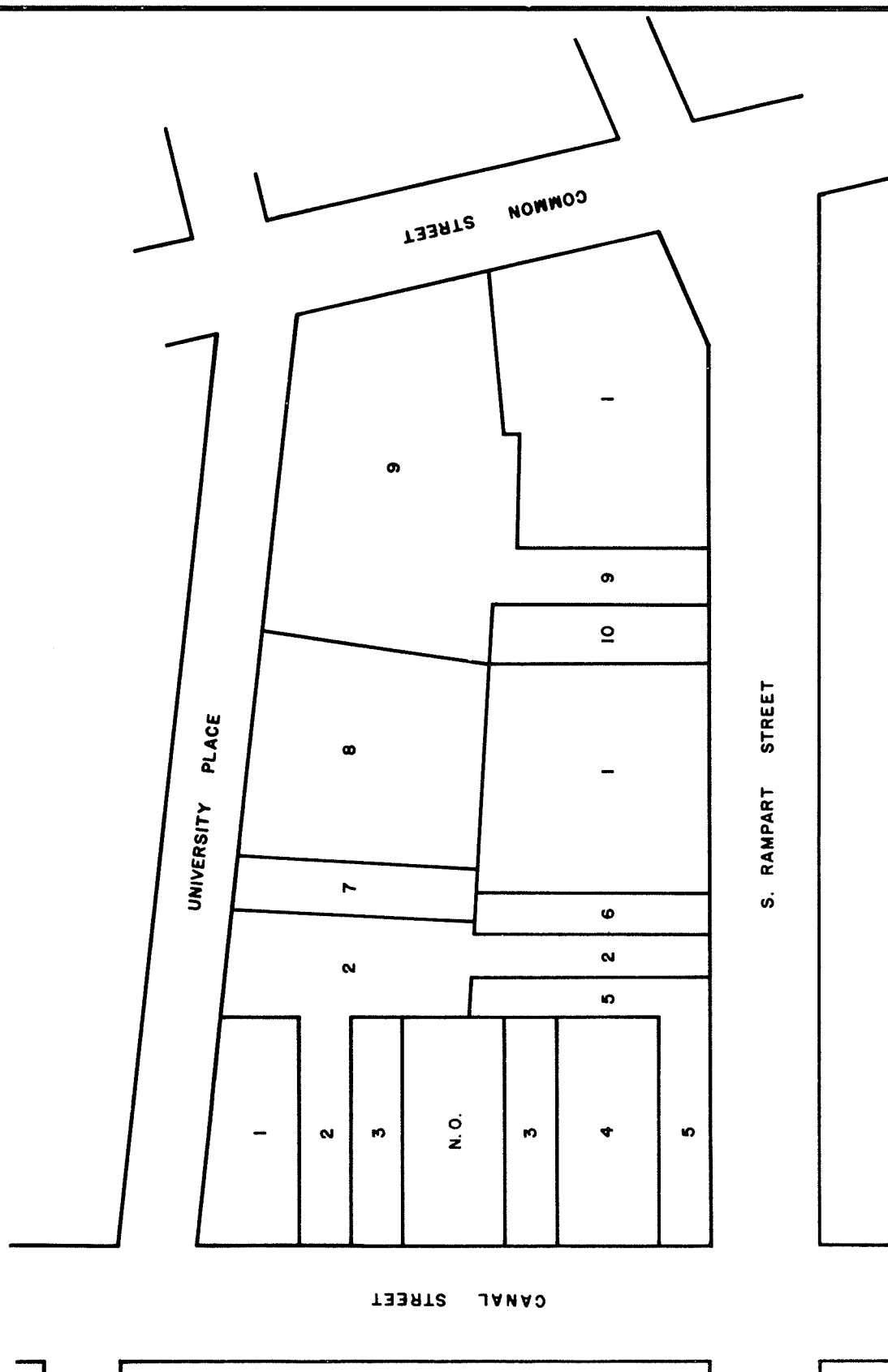
However, in spite of these important reasons for undertaking large-scale development and despite the need for and the desire to provide additional building space, there exists the formidable problem of land-assembly at a cost which will permit a developer to act. The complexity of this problem is shown in Figures 1 and 2. Each parcel within the block is numbered indicating a different owner or group of owners. It is obvious that the assembly of large building sites under these circumstances is extremely difficult. It is felt, however, that the best approach toward obtaining cooperation of property owners is to formulate a wide-spread redevelopment program to show what could be accomplished by a cooperative effort.

As a starting point, the property along Canal Street within the project boundaries has been assigned a development status indicating a relative desirability for redevelopment. The legend in Figure 3 describes the coding designations used in Figures 4 through 7 for indicating the development status of property within the study area, see Appendix B.

The five different categories are the following.

- a) Property on which the uses and structures are obsolete and redevelopment could take place immediately.
- b) Property on which either the uses are appropriate but the buildings are obsolete or the uses are inappropriate but the buildings are sound.
- c) Property on which development is in progress or has just been completed.
- d) Property which has been developed for a long period of time and will continue to be functional throughout the foreseeable future.
- e) Property which has historic or other special significance.

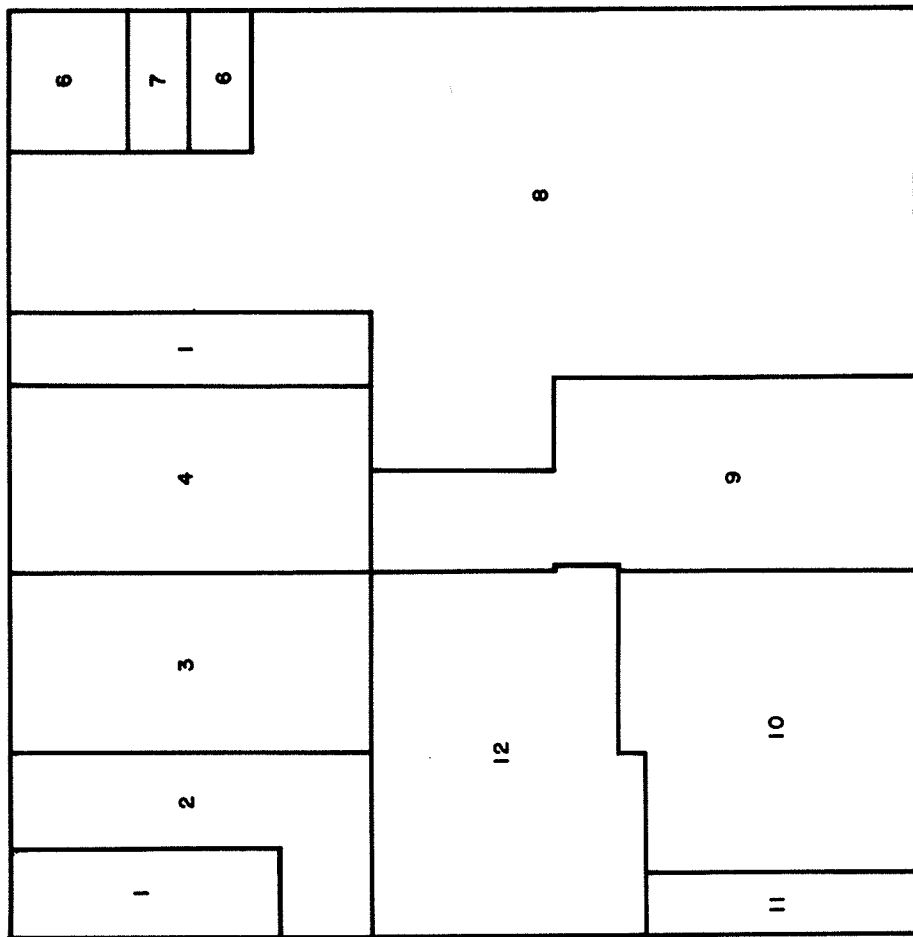
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CANAL STREET PROJECT
PROPERTY OWNERSHIP DISTRIBUTION
BLOCK NO. 30



CANAL STREET



BURGUNDY STREET

N. RAMPART STREET

IBERVILLE STREET

CANAL STREET PROJECT

PROPERTY OWNERSHIP DISTRIBUTION
BLOCK NO. 25



The following are specific comments and recommendations concerning each development area and every block within the Canal Street Project study area.

Development Area A. The shaded area of Figure 8 shows the extent of Development Area A. It is bounded by Canal Street, Decatur Street, Bienville Street, and Wells Street.

Between this area and the river is another area bounded by Canal, Wells, Bienville and the river. This area presently contains transmission equipment of New Orleans Public Service Inc., tracks of the New Orleans Public Belt Railroad, and the Bienville St. wharf. The Riverfront Expressway was to have passed through this area. No specific proposals for this area are made at this time other than to point out that it possesses three possible orientations: (a) to the International Center; (b) to the river; and (c) to the Vieux Carre. Each of these should be considered in development proposals.

Development Area A contains blocks numbered 2 through 10. The amount of land area contained in each block and certain combinations of blocks is given in Table A. The areas for groups of blocks include intervening streets.

TABLE A
BLOCK AREAS IN DEVELOPMENT AREA A

Block No.	Area In Sq. Ft.	Area In Acres
2	37,900	0.871
3	32,800	0.753
4	39,300	0.902
5	38,100	0.875
4 & 5	95,200	2.185
2 & 4 & 5	154,400	3.546
6 & 7	90,200	2.071
3 & 6 & 7	143,700	3.298
8	28,200	0.646
9	28,000	0.643
10	99,500	2.285

Within Development Area A many of the minor streets have become functionally obsolete. For this reason it is recommended that certain blocks be combined into large areas for development, absorbing the intervening streets where this is feasible. Problems of utility relocations will have to be overcome to accomplish these street closings.



BLOCK IDENTIFICATIONS
AND
DEVELOPMENT AREAS

CANAL STREET PROJECT

DEVELOPMENT AREA A

FIGURE NO. 8





One such combination involves blocks 2, 4 and 5. The total land area involved is 154,400 sq. ft. Block No. 2 is bounded by Canal Street, North Front Street, Crossman Street, and Wells Street. This square contains the abandoned building of the Coca-Cola Bottling Company. Included in Block No. 2 is the square bounded by Crossman Street, North Front Street, Iberville Street and Wells Street. It contains the Block "Y" Warehouse of the Public Service Corporation.

Block No. 4 is bounded by Canal Street, North Peters Street, Crossman Street and North Front Street. It contains an assortment of three or four-story buildings in extremely poor condition, and a small parcel devoted to parking. Some of the buildings are entirely vacant, some are vacant above the first floor, and some use the area above the first floor for low-grade living quarters. Most of the first floor uses are bars, the quality of which is completely alien to the character of the International Center across Canal Street.

Block No. 5 is bounded by Crossman Street, North Peters Street, Iberville Street and North Front Street. It contains the American Sugar Company offices housed in a two-story, well maintained structure fronting on North Peters Street and the warehouse of Maloney Trucking and Storage Co., Inc. The remainder of the block, containing approximately half of its area is devoted to parking.

One of the most pressing needs in relation to the convention potential of the Rivergate facilities and the Domed Stadium complex is the establishment of substantial hotel accommodations. Without these hotel rooms, the potential of the convention facilities cannot be fully utilized. With this in mind, a major hotel oriented to the Vieux Carre and the Rivergate Exhibition Center is proposed for the area bounded by Canal, North Peters, Iberville, and Wells Sts. In addition to the transient accommodations (approximately 800 rooms), the development could contain parking, restaurants, shops, and meeting rooms. If the bus-subway concept was adopted, the structure could be designed to have direct access to the underground bus-turn-around at the foot of Canal Street as well as an underground pedestrian passageway to the Rivergate Exhibition Center.

Blocks 3, 6, and 7 are bounded by Iberville, N. Peters, Bienville, and N. Front Streets. It contains an area of 143,700 square feet. The activities within this area consist of wholesaling and light industrial establishments. This entire area, together with the squares between Bienville and Conti should be included within a total riverfront development which is predominantly residential and developed to a density which is consistent with the character of the Vieux Carre.

Blocks 8 and 9 are bounded by Iberville, Decatur, Bienville, and N. Peters Streets, this square is divided into two parts by Clinton Street, which focuses on the rear of the Custom House building and functions as a service alley for the buildings on either side. At present, the square is devoted exclusively to commercial uses. It is strongly recommended that this square be preserved through restoration. A mixture of residential and commercial uses would be appropriate provided that the essential amenity of the square can be maintained. It is estimated that this area could accommodate approximately 50,000 square feet of retail space at street level and about 100 apartments on the second and third floors.

Block No. 10 is bounded by Canal, Decatur, Iberville, and No. Peters Streets. Its only building, occupying the entire square is the historically important Customs House which should be preserved.

Development Area B. In the original definition of the Canal Street Project Development Area B consisted of blocks numbered 11 through 14. This area is bounded by Common, St. Charles, Canal, and South Peters Streets. As the study progressed, it was decided to add to this area the area bounded by Poydras, Magazine, Common, and South Peters Streets. Block areas for Development Area B are given in Table B.

TABLE B
BLOCK AREAS FOR DEVELOPMENT AREA B

Block No.	Land Area in Sq. Ft.	Land Area in Acres
11	3,026	0.069
12	47,213	1.084
13	70,867	1.627
14	87,396	2.006

The area added to Development Area B has been recommended in previous studies as a complementary development to the International Center. The primary element of this area is the Board of Trade building which faces Magazine Street in the square bounded by Magazine, Gravier, Tchoupitoulas, and Natchez Alley. This building and those surrounding it form a very attractive ensemble of buildings which could be enhanced by renovation and landscaping. The recently completed plaza in front of the Board of Trade building on Magazine Street is indicative of the type of improvements that would be appropriate.

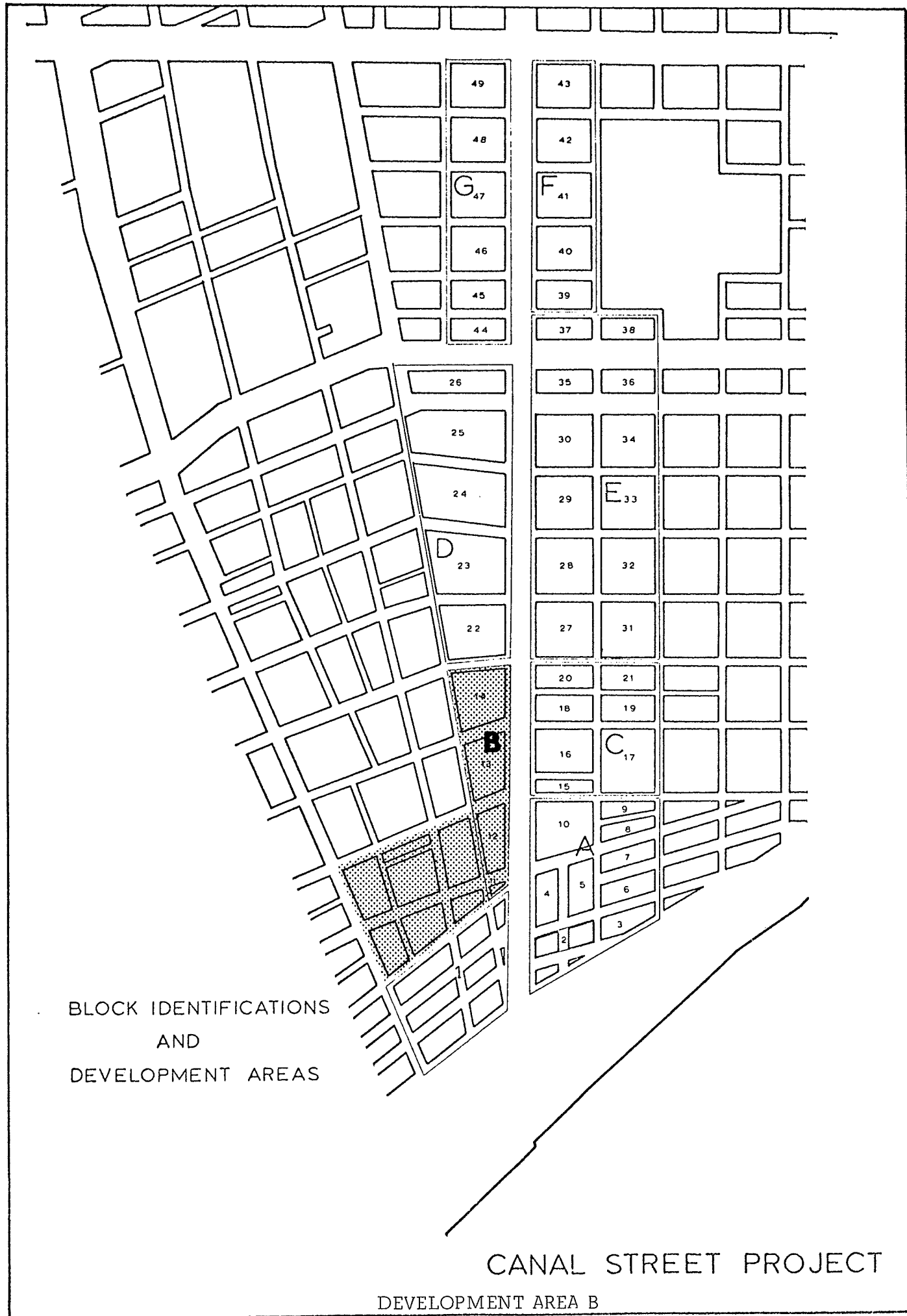
Block 11 is being developed as a plaza in conjunction with a proposed motor-hotel in the adjacent square bounded by Tchoupitoulas, Common, South Peters, and Gravier Streets.

BLOCK IDENTIFICATIONS
AND
DEVELOPMENT AREAS

CANAL STREET PROJECT

DEVELOPMENT AREA B

FIGURE NO. 9





In the area bounded by Tchoupitoulas, Gravier, South Peters, and Poydras Streets, it is recommended that consideration be given to a single development consisting of several levels of parking with one or two tower structures devoted to office use. The parking facilities could be connected to the Rivergate by overhead ramps. Besides serving the Rivergate during its peak parking demand periods, these facilities could serve the peripheral parking needs of the core area during its peak periods.

It is recommended that Natchez Alley be closed to vehicular traffic and the space converted to a pedestrian walkway, similar to Commerce Place.

The square bounded by Magazine, Common, Tchoupitoulas, and Gravier Streets is recommended to be redeveloped as office space. The ground floor of the redevelopment could be designed to accommodate many of the businesses which should appropriately remain in the area.

Block No. 12 is bounded by Magazine, Canal, Tchoupitoulas, and Common Streets. Some of the buildings in this area have already been demolished and those that remain should be phased out in the near future. The site has potential for a hotel structure. Fronting Canal Street across from the historic Customs House, the area is just a short distance from the Rivergate Exhibition facilities.

Block No. 13 is bounded by Camp, Canal, Magazine, and Common Streets. The square contains an assortment of buildings ranging from two to five floors in height. Most of the uses are wholesale distributors, but other uses include a drug store, a furniture store, a beauty school, a produce stand, lunch counter, and the former International Trade Mart building, now being used as an office building. While most of the buildings are in fair condition, it is strongly recommended that consideration be given to more appropriate and intensive use of this property even to the extent of rebuilding.

Block No. 14 is bounded by Common, St. Charles, Canal and Camp Streets. At present it is the river-side boundary of the office and retail core area of the central business district. It contains a variety of uses with men's shoes and clothing predominant on the St. Charles Street frontages and mixed uses on the Canal Street frontages, including retail clothing, jewelry, furs and luggage stores, a finance company and the Cigali office building. The central portion of the block is currently a parking lot. The corner of Camp St. and Common St. contains a variety of shops and bars.

The total redevelopment of these two blocks could bring about a deliberate, programmed redevelopment and renovation of all Canal Street properties. Since the major deterrent to large scale development is the assembly of land which, in turn, depends on what to do with businesses while the redevelopment is taking place, the first step of a redevelopment program would be to create a reservoir of space to which small businesses could relocate while the area from which they moved is being redeveloped. The initial reservoir of space should be located in an area where many of the activities that are located there could function just as well in some other location, not necessarily along Canal Street. It is felt that blocks 13 and 14 would provide such an area. Block 13 could be developed first followed by Block 14 and then others could follow as necessary.

The design of the initial reservoir of space should incorporate several important features. Among these are the following:

- 1) At least two levels of prime retail floor space should be included. Improved, attractive and convenient access to the second level of the development could make this space almost as rentable as ground floor space. The reason that many of the upper floors of buildings along Canal Street are now used only for secondary purposes is that access to them is poorly designed.
- 2) Major storage of merchandise should be located at least above the second level.
- 3) Off-street truck service should be provided underground. Deliveries could then be made to basement areas beneath the ground level stores. Trash could also be collected in these basement areas and disposed of without the necessity to pile it on the sidewalks until it is picked up.

When the reservoir of space is completed another large-scale development could be undertaken. Businesses from this new area which require a Canal Street location could move to the reservoir either temporarily or permanently until the new development is completed.

Development Area C. The shaded area of Figure 10 shows the extent of Development Area C. It is bounded by Canal, Royal, Bienville, and Decatur Streets. Development Area C contains blocks numbered 15 through 21. The amount of land area contained in each block is given in Table C.

BLOCK IDENTIFICATIONS
AND
DEVELOPMENT AREAS

CANAL STREET PROJECT

DEVELOPMENT AREA C

FIGURE NO. 10





TABLE C
BLOCK AREAS IN DEVELOPMENT AREA C

Block No.	Area in Sq. Ft.	Area in Acres
15	23,200	0.533
16	84,721	1.945
17	117,000	2.686
18	51,200	1.175
19	48,750	1.119
20	39,520	0.907
21	48,750	1.119

Block No. 15 is bounded by Canal, Dorsiere, Iberville, and Decatur Streets. This is a very narrow block with buildings fronting on Decatur Street and backing on Dorsiere Street. The buildings are generally in poor condition and many of the uses are inappropriate to the area. Redevelopment should be undertaken, oriented toward complementing the Custom House and accenting the entrance to the Vieux Carre. Because of the narrow width of the block it will be difficult to construct any significantly tall structure on the site.

Block No. 16 is bounded by Canal, Chartres, Iberville, and Dorsiere Streets. Almost the entire square is being developed into the Marriott Complex consisting of a twin tower structure. The first tower constructed will be devoted to hotel accommodations. The proposed second tower, to be constructed later, will be devoted to office space. To date this is the only project of significant magnitude along Canal Street.

Block No. 17 is bounded by Iberville, Chartres, Bienville, and Decatur Streets. It should be redeveloped through restoration and retention of appropriate uses. A significant number of townhouse apartment units could be built in the area. The introduction of some residential uses into this block as well as blocks 6 through 9 could mark the beginning of a shift from industrial uses to residential uses for this entire area of the Vieux Carre.

Block No. 18 is bounded by Canal, Exchange Pl., Iberville, and Chartres Streets. The square contains many small shops and low-grade bars and some apartments. The major activity in the block is the Werlein Music Store. Approximately one-third of the block facing the entire length along Canal Street should be redeveloped into lower level retail stores and upper level offices. The remaining two-thirds of the block facing the Vieux Carre and the Marriott complex could be devoted to lower level shops and upper level offices or apartments.

Block No. 19 is bounded by Iberville, Exchange Pl., Bienville, and Chartres Streets. For the most part this block should be developed through restoration and substituting small retail and tourist oriented shops for the existing storage and wholesaling activities. The frontages along Exchange Place should be completely renovated.

Block No. 20 is bounded by Exchange Pl., Canal, Royal, and Iberville Streets. Construction of a Holiday Inn Motor Hotel covering half of the block is nearing completion. Only the Canal Street frontages of this square remain to be redeveloped. Present uses should be encouraged to remain as part of the downtown retail establishment. However the building in this area should be phased out as soon as possible. The lower levels of new buildings could be used as retail space and the upper levels devoted to either office space or an extension of the Holiday Inn.

Block No. 21 is bounded by Exchange Pl., Iberville, Royal, and Bienville Streets. It is almost entirely covered by the Monteleone Hotel and its parking garage. There are other miscellaneous uses including a branch bank which leaves little need for any development on this block. The only area requiring any attention is Exchange Place which should be cleaned up and renovated.

Development Area D. The shaded area in Fig. 11 shows the extent of Development Area D. It is bounded by Common, Elks Pl., Canal, and St. Charles Streets. It consists of blocks numbered 22 through 26. Block areas for Development Area D are given in Table D.

TABLE D
BLOCK AREAS FOR DEVELOPMENT AREA D

Block No.	Land Area in Sq. Ft.	Land Area in Acres
22	106,873	2.453
23	141,780	3.255
24	145,618	3.343
25	136,629	3.137
26	69,338	1.592

Block No. 22 is bounded by St. Charles, Common, Carondelet, and Canal Streets. Approximately one-third of this square facing Common St. should be redeveloped with a high-rise structure devoted primarily to office space. The remainder of the block is in fairly good condition with only minor renovation to exterior facades being warranted at this time.

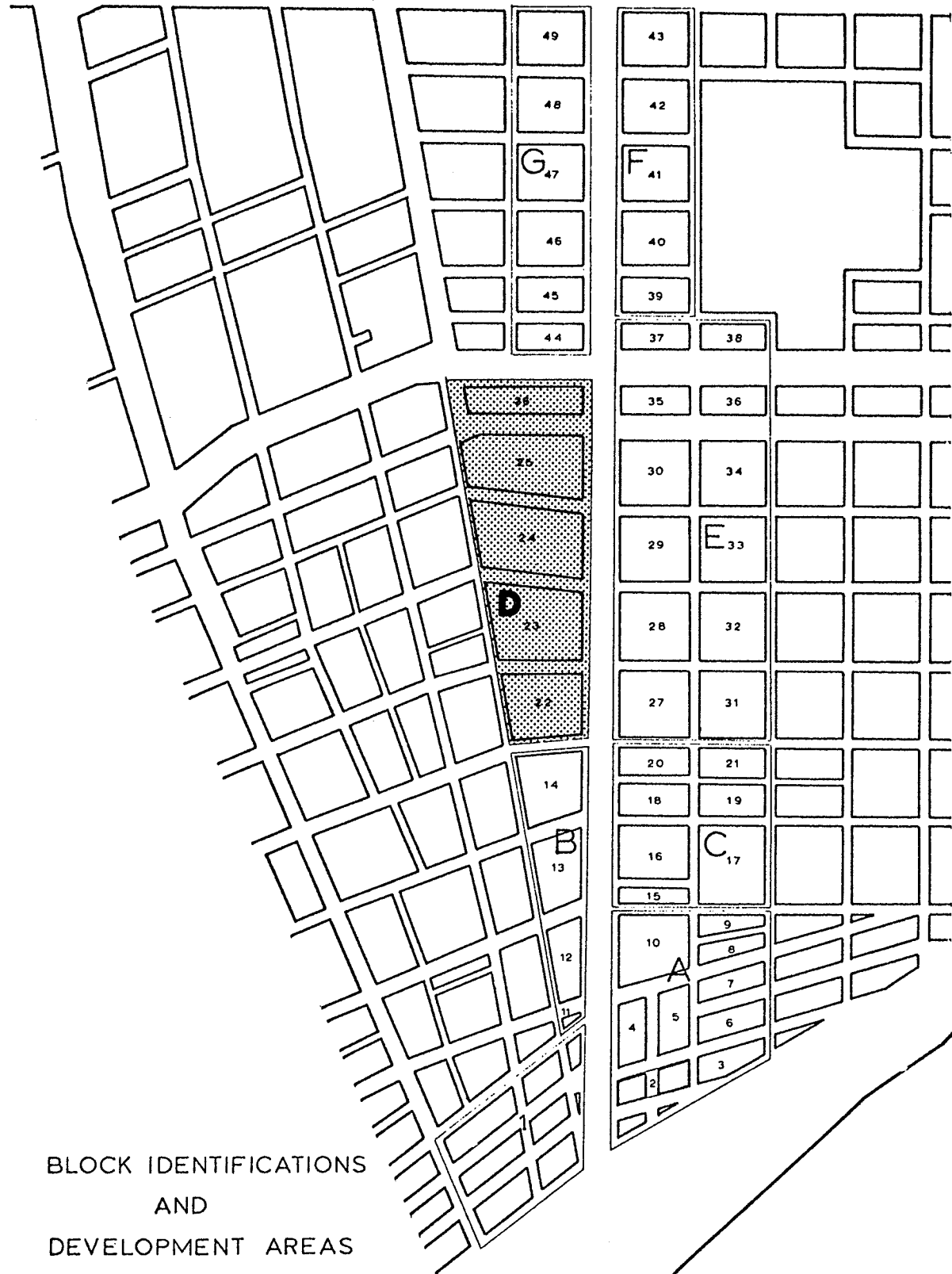
Block No. 23 is bounded by Carondelet, Common, Baronne, and Canal Streets. There is no need at the present time for any redevelopment in this block.

BLOCK IDENTIFICATIONS
AND
DEVELOPMENT AREAS

CANAL STREET PROJECT

DEVELOPMENT AREA D

FIGURE NO. 11



Block No. 24 is bounded by Baronne, Common, University Pl., and Canal Streets. Only the one-third area of the square facing Canal Street should be considered for redevelopment at this time. A high-rise structure at this location could be devoted either to office space or as additional hotel space to the adjacent, existing major hotel. The ground level would be developed as retail space with special provision for off-street loading and unloading.

Block No. 25 is bounded by University Place, Canal, Rampart, and Common Streets. Of all of the blocks in Development Area D, this one is perhaps most in need of redevelopment. The only significant activities on this block are the Elgin parking structure and the Orpheum Theater. The various miscellaneous retail establishments which occupy approximately half of the square fronting on University, Canal and Rampart Streets could be accommodated within development on the site or elsewhere in the CBD core area. The small site at the corner of Rampart and Common should also be considered for redevelopment. The space provided in high-rise buildings should be devoted primarily to offices. The site's relationship to recent office construction, relatively close parking facilities at the focal point of CBD access routes, and surrounding wide streets makes it very attractive as a high density office-retail complex.

Block No. 26 is bounded by Elks Place, Canal, University Place, and Common St. It is almost totally developed at the present time with acceptable core area uses. A small parcel in the middle of the square is devoted to ground level parking. One possibility would be to open Cleveland St. through to Rampart Street in order to improve what has become one of the major access routes to the core area. However, high acquisition costs may preclude this possibility. Another possibility would be to consider a multi-level parking structure for the site. However, a more thorough analysis of the site would be necessary to determine whether the dimensions of the area would permit an economical investment.

Development Area E. The shaded area in Fig. 12 shows the extent of Development Area E. It is bounded by Canal, Crozat, Bienville, and Royal Streets. It consists of blocks numbered 27 through 38.

Development Area E sits astride the recognized boundary of the Vieux Carre, Iberville Street. The squares fronting on Canal Street comprise a significant part of the core area retail activity. A large portion of the squares between Iberville and Bienville Streets has become service facilities to the retail activities fronting on Canal Street.

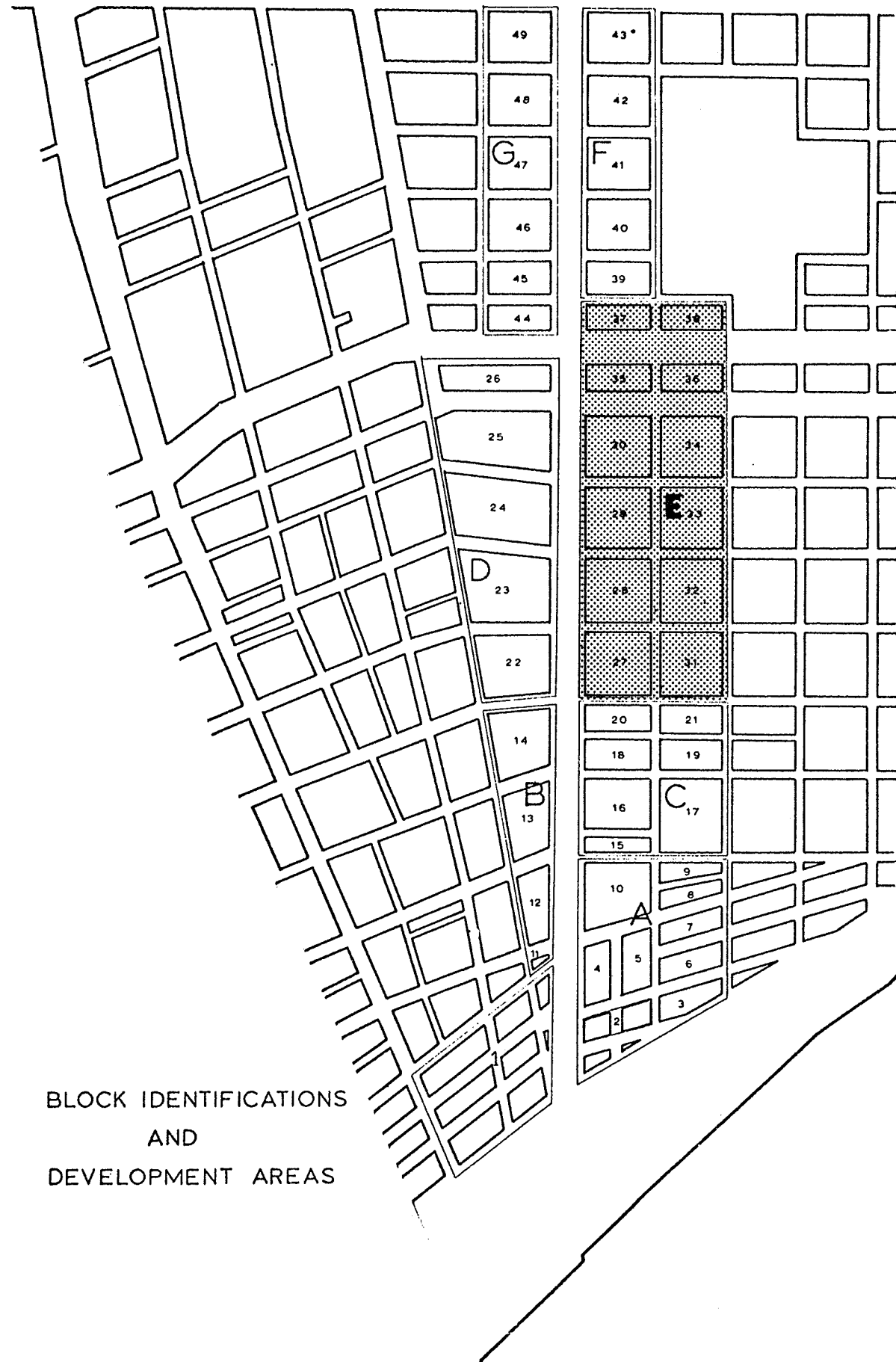


BLOCK IDENTIFICATIONS
AND
DEVELOPMENT AREAS

CANAL STREET PROJECT

DEVELOPMENT AREA E

FIGURE NO. 12





Block areas for Development Area E are given in Table E.

TABLE E
BLOCK AREAS FOR DEVELOPMENT AREA E

Block No.	Land Area in Sq. Ft.	Land Area in Acres
27	102,400	2.351
28	102,400	2.351
29	103,200	2.369
30	103,200	2.369
31	104,000	2.388
32	104,000	2.388
33	103,200	2.369
34	103,200	2.369
35	40,958	0.940
36	41,280	0.948
37	42,545	0.977
38	42,892	0.985

Block No. 27 is bounded by Canal, Bourbon, Iberville, and Royal Streets. The square is predominantly devoted to retail activities with the exception of a few eating establishments and a parking garage. For the most part, structures have become functionally obsolete, and should be replaced. Some increase in the density of activities should be considered, but extremely high buildings should be avoided. Particular attention should be given to the Royal and Iberville Street frontages.

An analysis of the recently completed renovation of some Canal Street frontage is warranted. While the efforts and investment in renovation are to be applauded certain critical points should also be made. First, the size and shape of the rebuilding has weakened the possibility of large-scale, total redevelopment of the square. Second, it has tended to define the style and scale of future development in the block. Third, it has made no contribution to the concept of off-street servicing to relieve core area street congestion.

Block No. 28 is bounded by Canal, Dauphine, Iberville, and Bourbon Streets. No major redevelopment is suggested for this square. Only minor facade renovation of some Canal Street frontages is required. Along Iberville Street some major facade treatments are required. Redesign of the overhead service bridges should be undertaken. Service and delivery trucks should be removed from Iberville Street to the service buildings between Iberville and Bienville Streets. Parking space for service and building repair trucks should be provided in adjacent parking garages. Consideration should be given to redesigning the Iberville St. frontage of the ground

floor of D. H. Holmes as a passenger waiting area. This would eliminate a source of congestion from Canal Street as well as providing an attractive customer service.

Block No. 29 is bounded by Canal, Burgundy, Iberville, and Dauphine Streets. Its condition and potential are similar to those of Block No. 28. The same recommendations concerning the overhead service bridge, the removal of service and delivery trucks and the reallocation of ground level floor space are applicable to the Maison Blanche complex. It is further recommended that consideration be given to providing an upper level pedestrian bridge across Dauphine Street between the D. H. Holmes and Maison Blanche department stores. This would relieve a great deal of pedestrian traffic at the Dauphine-Canal Street intersection.

Block No. 30 is bounded by Canal, Rampart, Iberville, and Burgundy Streets. It is developed totally as retail space. Approximately one-third of the square is currently being renovated by the F. W. Woolworth Company. It is recommended that the remainder of the square be totally developed to provide upper level office space and lower level retail space. An upper level pedestrian connection could be made into the Audubon Building and Maison Blanche Building thereby creating a three block upper level pedestrian corridor.

Block No. 31 is bounded by Iberville, Bourbon, Bienville, and Royal Streets. A motor-hotel is currently being developed along the Bienville Street frontage. Except for minor renovation along Iberville and Bourbon Streets, no major redevelopment is recommended.

Block No. 32 is bounded by Iberville, Dauphine, Bienville, and Bourbon Streets. Except for the Bourbon Street frontages, the square is devoted mainly to parking and secondary retail activity. The newly built D. H. Holmes parking facility and restaurant is a worthwhile example of what could be done to enhance the environmental quality along Iberville Street and change its character from a shabby service street to a pleasant pedestrian-shopper oriented space.

Block No. 33 is bounded by Iberville, Burgundy, Bienville, and Dauphine Streets. The square is similar in character to Block No. 32 and the same recommendations apply.

Block No. 34 is bounded by Iberville, Rampart, Bienville, and Burgundy Streets. The major occupants of this square are the New Orleans Athletic Club, a multi-level parking garage, and the D. H. Holmes Tire Store. Consideration should be given to developing the entire square into a hotel-motel complex.

Block No. 35 is bounded by Canal, Basin, Iberville and Rampart Streets. Almost the entire square is occupied by the Saenger Theater. No major redevelopment is recommended at this time.

Block No. 36 is bounded by Iberville, Basin, Bienville, and Rampart Streets. Consideration should be given to total redevelopment as either a motel or high-rise apartment structure.

Block Nos. 37 and 38 are bounded by Canal, Crozat, Bienville, and Basin Streets. Both squares are devoted almost entirely to the Krauss Company department store. No change is recommended in use of this area although some renovation of the Canal Street frontage should be considered.

Development Area F. The shaded area in Fig. 13 shows the extent of Development Area F. It is bounded by Canal, Claiborne, Iberville, and Crozat Streets. It consists of blocks numbered 39 through 43. Block areas for Development Area F are given in Table F.

TABLE F
BLOCK AREAS FOR DEVELOPMENT AREA F

Block No.	Land Area in Sq. Ft.	Land Area in Acres
39	49,600	1.139
40	80,128	1.839
41	80,128	1.839
42	80,128	1.839
43	80,128	1.839

Development Area F will be discussed in its entirety rather than block by block. The only significant structures within this area are:

- 1) A multi-level parking garage in Block No. 40.
- 2) The Wirth Building, a three-store building, in relatively good condition, located in Block No. 40.
- 3) The Texaco Building in Block No. 41.
- 4) The recently built New Orleans Motor Company building in Block No. 43.

The remainder of the area is almost entirely vacant or devoted to a variety of temporary activities.

Consideration should be given to total redevelopment in multi-use buildings. Lower level shopping, middle level office, and upper level apartment combinations would provide the much-needed CBD residential population. Parking facilities

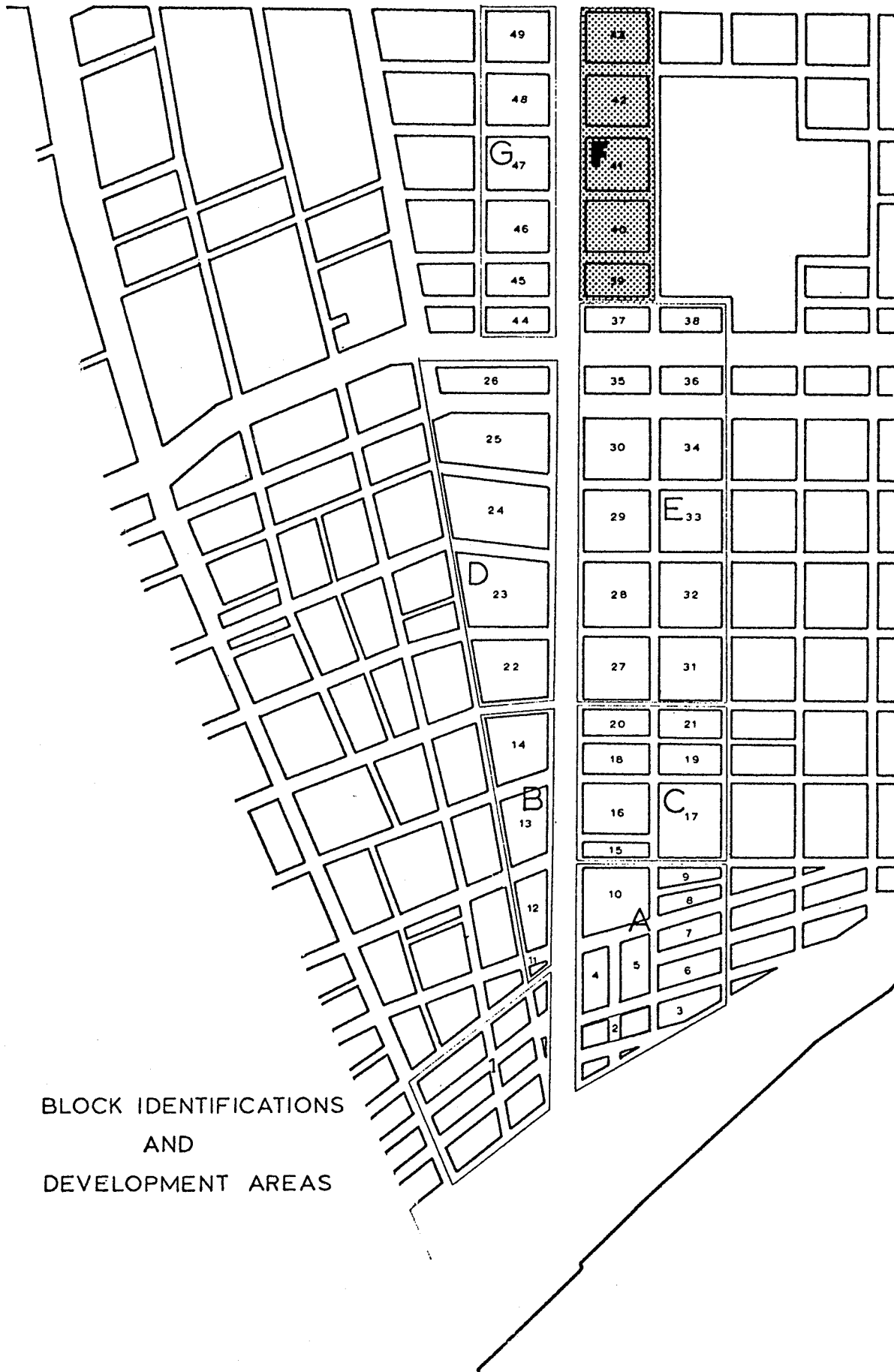


BLOCK IDENTIFICATIONS
AND
DEVELOPMENT AREAS

CANAL STREET PROJECT

DEVELOPMENT AREA F

FIGURE NO. 13





could be located along Iberville Street. Serious consideration should be given to building in the air space above the streets connecting Iberville and Canal Street in this area, since these streets are used only for a minimum of local traffic. Further, consideration should be given to opening Bienville Street through the Bienville Housing Project to relieve the serious traffic problems of the CBD area.

Development Area G. The shaded area in Fig. 14 shows the extent of Development Area G. It is bounded by Elks Place, Cleveland, Claiborne, and Canal Streets. It consists of blocks numbered 44 through 49. Block areas for Development Area G are given in Table G.

TABLE G
BLOCK AREAS FOR DEVELOPMENT AREA G

Block No.	Land Area in Sq. Ft.	Land Area in Acres
44	41,600	0.955
45	51,200	1.175
46	81,920	1.881
47	81,920	1.881
48	81,920	1.881
49	81,920	1.881

Development Area G will be discussed in its entirety rather than block by block. Significant structures within this area are:

- 1) The Gulf Oil Building and the Joy Theater in Block No. 44.
- 2) Hawthorne Hall, an apartment building for married students of the Tulane University Medical School in Block No. 45.
- 3) The Jung Hotel and Convention Center in Block No. 47.
- 4) The Odeco Building and the Governor House Motor Hotel in Block No. 49.

Ideally, Development Area G should be treated as a total development along with the adjacent squares between Cleveland Street and Tulane Avenue. This entire area should be developed in a manner similar to that which was proposed for Development Area F. That is, a mixture of multi-use buildings including office, apartment and hotel space. Where feasible, air space over certain streets could also be developed. Hotel and apartment space would be particularly attractive considering the location relative to the core area, the Civic Center, the proposed Dome Stadium, and access routes to the CBD. With Cleveland Street becoming one of the major access routes to



BLOCK IDENTIFICATIONS
AND
DEVELOPMENT AREAS

CANAL STREET PROJECT

DEVELOPMENT AREA G

FIGURE NO. 14





the CBD, parking space could be located in this area to absorb vehicular traffic before it reaches the core area. A shuttle bus system would provide the final link to the core area for commuting motorists as well as resident population. Lower floors could be devoted to service and shopping facilities.

IMPROVEMENT OF THE ENVIRONMENTAL QUALITY

One of the objectives of this study was to suggest ways of improving the environmental quality of the Canal Street area. While the obvious big problems continue to be the redevelopment of obsolete buildings, the encouragement of more productive land usage, and the improvement in quality and efficiency of all transportation modes, it is nevertheless necessary to give consideration to the many miscellaneous details which form the environmental space along Canal Street.

In order to arrive at conclusions for suggesting improvements, it is necessary to describe what is wrong with the existing environment. The order of presentation of the various points has no bearing on the relative importance of each particular problem.

Pedestrian Space. It is felt that in the allocation of space, the pedestrian has fared badly. One of the major recommendations of this report is to give favored consideration to the pedestrian in the reallocation of space. In terms of public space, this means widening the sidewalks and shortening the walking distance across Canal Street; adopting stricter regulations concerning the design and location of newspaper vending machines, mailboxes, and other sidewalk appurtenances which encroach on pedestrian space; and prohibiting the accumulation of trash on the sidewalk. In terms of non-public space, it means providing building setbacks and arcades. Better access to second and third levels will compensate for space lost to these facilities. Second level pedestrian bridges across narrow streets between large pedestrian generators will help relieve sidewalk congestion during peak hours. Some obvious locations would be to connect Maison Blanche and D. H. Holmes across Dauphine Street. Another would be to connect the NBC Building, Pere Marquette, Sears and 225 Baronne Building. As new development takes place this kind of facility should be included in the initial design of the structure where it is considered appropriate.

Canopies. Pedestrians using the sidewalks of Canal Street are almost completely exposed to the unpleasantness of adverse weather conditions. Compared to the controlled environment conditions of most new regional shopping centers this situation contributes to the unfavorable competitive position of core area retail establishments. It is felt that allowing building canopies to extend almost to the existing curb line either being cantilevered from the building or with light columns providing some support would contribute substantially to relieving this problem. The shade provided by these canopies would moderate the extremely hot temperatures of summer and give protection during rainy weather. In some cases where

the entire block has provided sidewalk coverings, air-conditioning and heating could be installed to provide additional comfort. The area provided by widened sidewalks would serve to separate street traffic from the supporting columns of the canopies. Areas of new development, in particular, should be encouraged to incorporate this feature in their design. Figures 15 and 16 show examples of canopied sidewalks. In Figure 15 the canopy is used as a second level pedestrian walkway providing access to second level retail stores.

Signs. All of the efforts directed toward improving the environmental quality along Canal Street will be nullified without some kind of control on the design and placement of signs. Recognizing the legitimate rights and benefits of advertising to the proper functioning of our economy it would be worthless to invest in those things which bring order and comfort to the Canal Street environment and to continue the visual discord which currently exists there. It is only necessary to consciously observe the visual appearance of the scene to become painfully aware of the problem. It is almost as though some buildings exist solely to support the signs which adorn their facades and perch upon their roofs. The obvious benefits of a mass audience are exploited even further by erecting larger and larger signs with increasingly more elaborate supporting structures. The result is a sign that is grossly out of scale with the building that supports it.

While in some instances, the large signs mercifully obscure the shabbiness of obsolete buildings, the basic development goal should be to create new buildings on which the signs are incidental and related to the activities within them. To this end, it is recommended that general advertising signs be excluded from this most important space within our city. Every effort should be made to incorporate some kind of sign regulations within the new proposed zoning regulations. However, progress has been relatively slow in this regard because of disputes between the legitimate interests of the outdoor advertising industry and the essential need to eliminate discordant visual elements from the Canal Street environment. It is recommended that vigorous support be given to an equitable solution to this problem without sacrificing the goal of improving the environmental quality of the Canal Street area.

Street Furniture. Street furniture refers to all of the necessary appurtenances which must be located along the sidewalk or neutral ground as a service to the public. It includes signs and sign posts, traffic signals, mailboxes, newspaper stands, fire hydrants, trees and flower planters, waste receptacles, and light poles. While it is not the purpose of this

report to treat in depth the minute details of design of each of these elements, some suggestions are shown in Figures 17 and 18.

The following are some criteria which should be considered in the design of these features:

- 1) Minimize the use of space by combining several items. For example, street lights and traffic signs could use common supports. Mailboxes, newspaper vending machines, and waste receptacles could be grouped together.
- 2) Locate these necessary items in such a way as not to interfere with the movements of pedestrians.
- 3) Where feasible, make a special effort to undertake unique designs for these common elements rather than always using standard designs in an effort to reinforce the unique character of Canal Street.

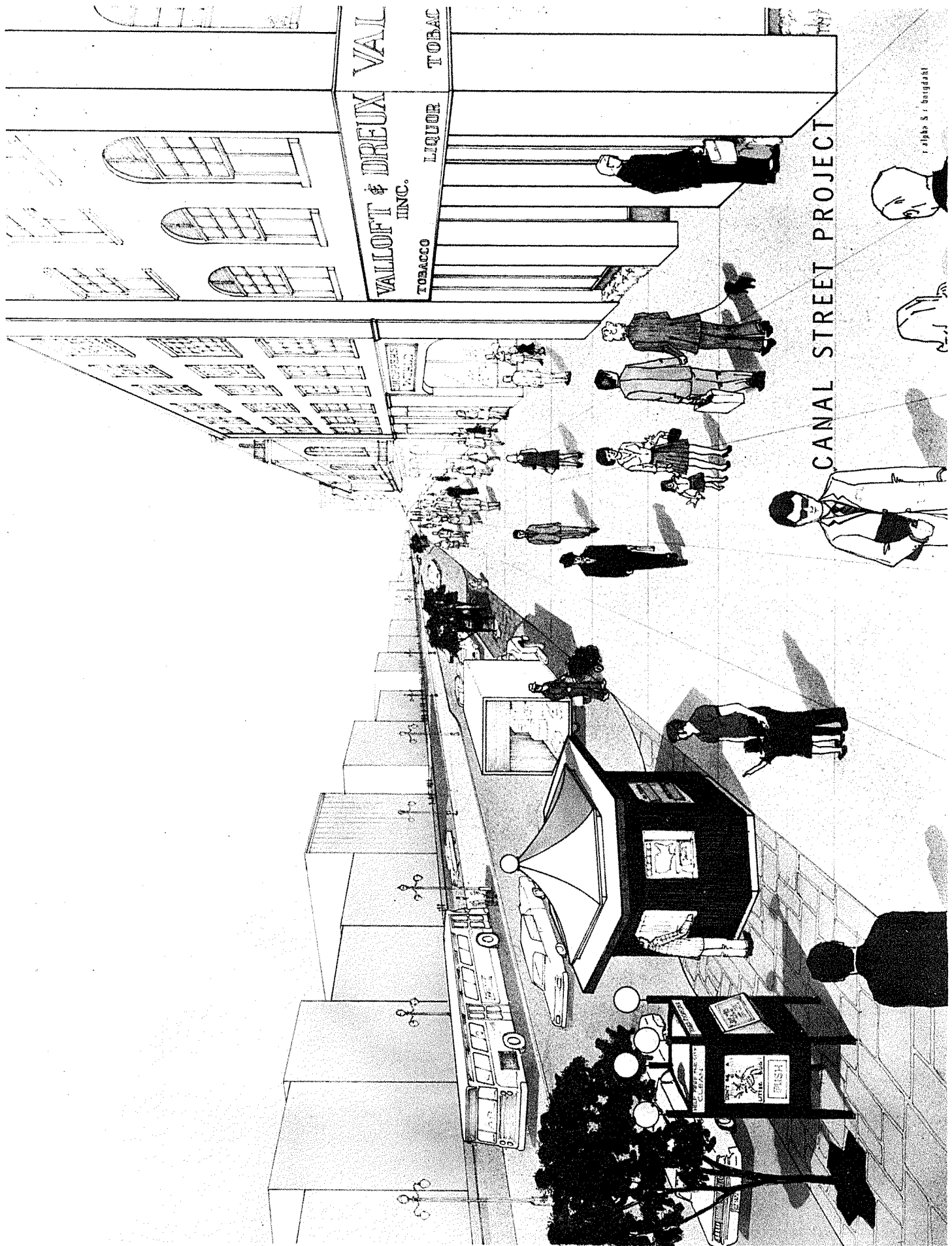
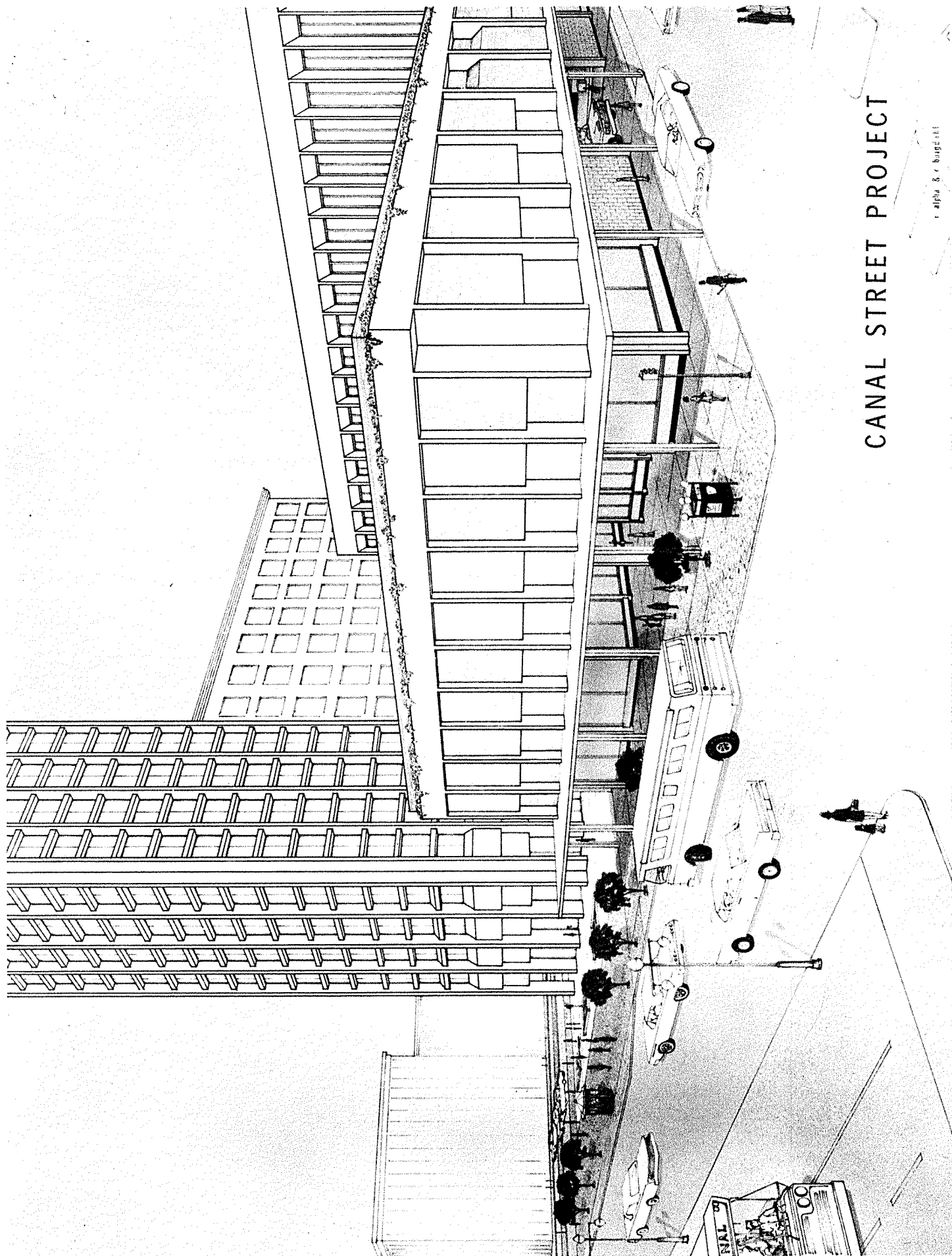


FIGURE NO. 17



CANAL STREET PROJECT

alpha & budget all

FIGURE NO. 18

PART II

TRANSPORTATION

TRANSPORTATION IN THE CENTRAL BUSINESS DISTRICT

The movement of people and/or goods into and within the CBD can be analyzed as four major, interrelated activities: vehicular traffic, public transit, pedestrian traffic and termination activities. Termination activities include parking and loading facilities both on and off-street.

The major difficulty in improving the total transportation system in the core area of New Orleans is that these four different activities are attempting to use the same space, and improvements to one activity generally result in deficiencies in the other activities. For example, vehicular traffic capacity can be increased at little or no cost by banning on-street parking and loading zones resulting in increased demand for off-street parking and loading zones.

This constant conflict results in each activity being operated at less than optimum level. The only way to resolve this conflict is to increase the total space available for all activities, but even this solution is limited because of the limited land area. Therefore, a real world solution with social, political and economic constraints will require a compromise between the space allocations to each activity.

Provision of this additional space for transportation can be accomplished in several ways. One, there can be a net increase in space by acquisition of additional right-of-way for increased street widths or acquisition of off-street space for transferring termination activities from on-street space.

Two, the transportation system might be converted into a two-level operation utilizing second level transit ways or pedestrian ways, or subsurface tunnels for transit, pedestrian walks, roadways, and termination facilities. A third technique available is the time sharing of the existing space by limiting certain activities to certain time periods. This third method is a limited solution and cannot handle continued increases in traffic demand, but it is an effective solution for the short term.

In seeking solutions to the core area problems, the following guidelines are useful in establishing a framework for comparing alternate solutions and establishing priorities between the various activities.

1. The primary function of a transportation system is to move people and/or goods. The vehicle used is a part of the system.
2. The movement of people and/or goods must be accomplished in an efficient, economical and safe manner. Concentrating on providing an economical system can result in an unsafe and/or inefficient system.

3. The whole transportation system is a public responsibility. This does not mean that there must be public ownership, but there must be public regulation of all segments of the system.

In the following sections of this report, the various transportation activities are discussed and alternate solutions are proposed.

MASS TRANSPORTATION

While the primary concern of this report is the improvement of Canal Street and its immediate surroundings, the impact of public transit on the center of the city is so great that some consideration must be given to the entire system and not just to the Central Business District distribution system.

Since the end of World War II almost a quarter century ago, most large cities throughout the United States have witnessed the gradual decline in the use of public transportation as the primary mode of travel to the Central Business District. While transit patronage per capita in New Orleans is higher than the national average, it has also been declining, but at a rate which has been much less than the nation-wide trend. Several factors have contributed to the favorable position of New Orleans transit usage compared with that of other cities.

First has been the excellent service and low fare structure provided by the New Orleans Public Service transit operation. The low fare is possible because of the uncommon arrangement of the utility company subsidizing its transit operation from its electrical and gas operations. This subsidy amounted to \$6,358,082 for 1966 or approximately seven cents per ride. Table H shows comparable figures for the past three years. The decline in passenger volume and the increase in operating costs are creating pressures to institute a fare increase in order to offset these financial losses.

TABLE H

Year	<u>Total Annual Revenue</u> <u>Passengers</u>	<u>Annual Direct</u> <u>Operating Loss*</u>	<u>Loss Per</u> <u>Passenger</u>
1966	87,248,948	\$6,358,082	7.287 cents
1967	85,458,444	\$7,127,623	8.340 "
1968	85,140,181	\$7,788,659	9.148 "

* Direct operating loss does not include return on investment or amortization of paving and relocation costs associated with conversion of Canal Street median for bus operations.

While an internally subsidized transit fare by New Orleans Public Service is an apparent advantage in maintaining and attracting transit patronage on its system, it becomes a distinct disadvantage when it becomes necessary to extend transit service to the surrounding suburban parishes where the gas and electric services are furnished by other utility companies. The same internal subsidy arrangements are no longer possible and fares must be set at a higher level to make up the losses.

The second contributing factor to the comparatively slow decline of transit usage has been the relatively slow suburban residential growth rate. In recent years, however, this condition has changed dramatically with vast, new areas opening to development.

In the report "Economic Survey and Market Analysis of the New Orleans Central Area" prepared by the Real Estate Research Corporation several trends were noted which if not planned for will ultimately weaken the core area. The first of these trends is that the location of residences of the CBD working population is shifting. In 1959, 80.7% of the CBD workers lived in Orleans Parish while in 1967 only 70.9% did so. Most significant is the fact that this shift in residential location is to areas beyond the NOPSI transit system coverage. This trend is emphasized by the fact that only 40.2% of the CBD workers utilized public transportation modes in 1967 compared to 63.4% in 1958.

Another indication of the change in residential location within the New Orleans metropolitan area is that the pedestrian interviews in the CBD in 1967 listed 69.3% of those interviewed as residing in Orleans Parish compared to 74.4% in 1958. The pedestrian interviews also showed that the number of pedestrians utilizing public transportation decreased from 69.2% in 1958 to 57.1% in 1967. These trends reflect the need for providing more attractive transit service to the suburbs.

Other factors which have contributed to the favorable position of New Orleans transit usage are the compact, geographic shape of the city, and the relatively efficient downtown distribution system with the reserved right-of-way along Canal Street.

The arrangement of the transit system in the Central Business District serves two purposes. One, the main lines are utilized as the CBD distribution network, and secondly, the system is arranged to avoid too large a concentration of transit vehicles on a single street.

One of the major complaints voiced concerning the transit network is the number of buses traveling through the Vieux Carre. This arrangement is necessary because of the lack of arterial streets in the area and the need to provide service throughout the Quarter. The cancellation of the river-front expressway eliminates an opportunity to reroute several of the lines out of the Quarter. This lost opportunity is tragic because a limited survey of transit riders, made in September, 1967, indicated that the majority of passengers using the five transit lines in the Vieux Carre boarded prior to entering and alighted after leaving the Quarter (see appendix A). Thus it would appear that the transit vehicles

in the Quarter are serving not only the Quarter but also CBD areas outside the Quarter, and perhaps some of these vehicles could be rerouted.

Another problem associated with the existing transit network is the traffic disruption at the Canal Street intersections caused by turning buses. Any rerouting that could eliminate or reduce the number of bus turning movements would improve the traffic flow.

In spite of the declining position of public transportation, the peak hour traffic problem is not as bad in New Orleans as it is in some other cities of comparable size. This is in part due to the relatively small increase in core area office building construction. The Real Estate Research Corporation report showed that for the period from 1959 to 1968 there was a net loss of 427,300 square feet of gross building area in the core area of the CBD. During the same period the number of employees showed a net increase of only 748. The fact of this stable core-area worker population and the diffusion of new office construction to non-core areas have contributed to the weakening of public transit's position.

However, since this report was published several major construction projects have been started within the core area which will add significantly to the office space and employment population. This significant activity in core area construction will affect the decline observed in the number of people entering the Central Business District on an average weekday between 7 A. M. and 7 P. M. CBD cordon counts showed that between 1956 and 1966, this number decreased from 260,136 to 242,998 while the number of vehicles increased from 126,241 to 134,913. The number of transit riders decreased from 104,087 to 78,450. The total decrease in people entering was 17,138 while the decrease in transit users was 25,637. The transit user decrease was 8,499 greater than the total decline which implied that not only are some former transit users no longer coming to the CBD, but also, a large number of transit users have converted to private automobiles.

Another aspect of the problems associated with the decline in transit usage is the increased demand for additional parking facilities. Based on 1956 and 1966 cordon counts, the maximum accumulation of passengers in the CBD between 1 and 2 P. M. decreased by 5900 (58,700 to 52,800), but the decrease in transit users was 7400 (35,200 to 25,800) while automobile users increased by 3500 (23,500 to 27,000). Using average automobile occupancy values of 1.58 for 1956 and 1.50 for 1966, the increase of 3500 automobile users resulted in an increase of 3100 private vehicles in the CBD.

The importance of the public transit system on the economic vitality of the CBD must always be kept in mind. As indicated in the Economic Survey, the retail sales in the CBD as compared

to the total retail sales in the New Orleans SMSA was the highest in the nation in 1963 for cities over 500,000. A major factor in maintaining this strong CBD is the excellent public transportation system which focuses on the CBD. If the city is to retain this strong core area, the public transit system must maintain and improve its service in line with the growth of the metropolitan area.

One of the major problems to be resolved in the planning of a public transportation system for metropolitan New Orleans is that of providing a unified transit system throughout the area with a single fare structure which is low enough to maintain or attract patrons but which will allocate the necessary subsidy costs equitably over the entire metropolitan population.

The second major problem in providing public transit service, is the need to expand service to the suburbs or growing areas before the demand is high enough to pay for the service. If no transit service is provided during the early area development, the residents who live there must solve their personal transportation problem by the purchase and use of automobiles. Once a potential transit customer has been forced to become an automobile user, it is extremely difficult if not impossible to convert him back to transit use. Since many of the suburban residents still work in the city, the percentage of transit users to automobile users entering the CBD will decrease, the amount of congestion will increase, and the demand for parking will increase.

CENTRAL BUSINESS DISTRICT TRAFFIC

While the peak hour traffic problem may be worse in some other cities, it has reached a level in New Orleans at which many citizens are beginning to express their annoyance at the inconvenience and discomfort of congestion and delays. What is most alarming, however, is the current state of plans for future improvements in the transportation system as it relates to the Central Business District.

The controversy surrounding the Riverfront-Elysian Fields Expressway and the subsequent cancellation of that project will have serious and damaging effects on that part of the CBD expressway system which has already been built. Generating a completely new, feasible transportation plan for the Central Area will take a minimum of three to five years before construction can even begin with another five years to become operational. In addition, there is only an uncertain hope of federal or state financial assistance. While this is a disappointing outlook in terms of immediate relief to some annoying traffic problems it does offer the opportunity of considering a wider range of alternative solutions.

There is no doubt of the urgency of finding a solution to the Central Area transportation problem. However, any solution to the Central Area transportation problem must necessarily be a part of a metropolitan-wide transportation solution, since the trips which are attracted to the Central Business District originate throughout the metropolitan area. Whatever immediate actions are taken to relieve downtown traffic problems must complement any future metropolitan transportation system. The various alternatives discussed in this report are therefore preliminary in nature and must be further studied as part of a metropolitan transportation system.

TRAFFIC IMPROVEMENTS IN THE CENTRAL BUSINESS DISTRICT

A study of the various transportation alternatives for the Central Area must begin with a review of the functional objectives and priorities upon which final design decisions can be based. The basic transportation goals which have been enunciated are the following:

- a) Better access to the Central Area.
- b) Improved vehicular circulation within the Central Area.
- c) Improved mass transit to the Central Area.
- d) More parking facilities.
- e) More efficient truck service facilities.
- f) An improved pedestrian environment with emphasis on ease of circulation.

It is obvious that these are not independent objectives and that in maximizing any one of them others may be adversely affected. In addition, each of the above goals has definite spatial requirements. With a finite amount of space available, it becomes necessary to establish priorities in order that space allocations can be made.

Another factor to consider in a study which focuses on the Central Area is that what might be determined to be a maximum feasible solution for transportation within the Central Area may not be supportable in terms of the type and intensity of development throughout the remainder of the metropolitan region. It is frequently suggested that the development of a high capacity, rapid transit system, either of the dual-rail or monorail type would provide the necessary relief which we seek to the downtown traffic problem. However, it is questionable whether the intensity of residential development throughout the metropolitan region would support such a system.

There is no doubt that New Orleans must improve its mass transit system and adopt some form of mass rapid transit. There is, however, a wide spectrum of system types from which the proper solution can be obtained. The design of a mass rapid transit system is very complex and depends upon many factors. Fundamentally its form depends upon the spatial arrangement of activities within the metropolitan area and the intensity at which these activities occur.

Present population densities within the New Orleans metropolitan area are not high enough to support a high-capacity, rail rapid transit system. The most likely system to serve an area of this type would be an express bus system utilizing either expressways or reserved right-of-ways. For the purposes of this report, it is assumed that Canal Street

will be the major CBD terminal point for a system of this type. In addition, it is assumed that the existing local bus system will remain essentially unchanged and continue to use Canal Street as its Central Area terminal.

This study initially considered four transportation alternatives. The following is a discussion of each of the proposed transportation alternatives with a concise statement of the advantages and disadvantages of each in relation to the previously stated functional objectives.

ALTERNATE NO. 1

This proposal is Method "A" described in Guidelines Paper No. 8. Its essential features include:

- a) Eliminate curb parking.
- b) Widen each sidewalk by 10 feet.
- c) Continue transit operations within the neutral ground.
- d) Develop Iberville-Bienville as a parallel traffic artery.
- e) Eliminate some cross-street movements.

Some of its advantages are the following:

- a) Increases space available for pedestrian use.
- b) Reduces walking distance for pedestrians crossing Canal Street.
- c) Modestly improves the flow of transit.
- d) Offers a chance for substantial rebuilding and beautification of sidewalk areas.
- e) Provides a relatively inexpensive solution requiring no investment in overhead or underground structures.

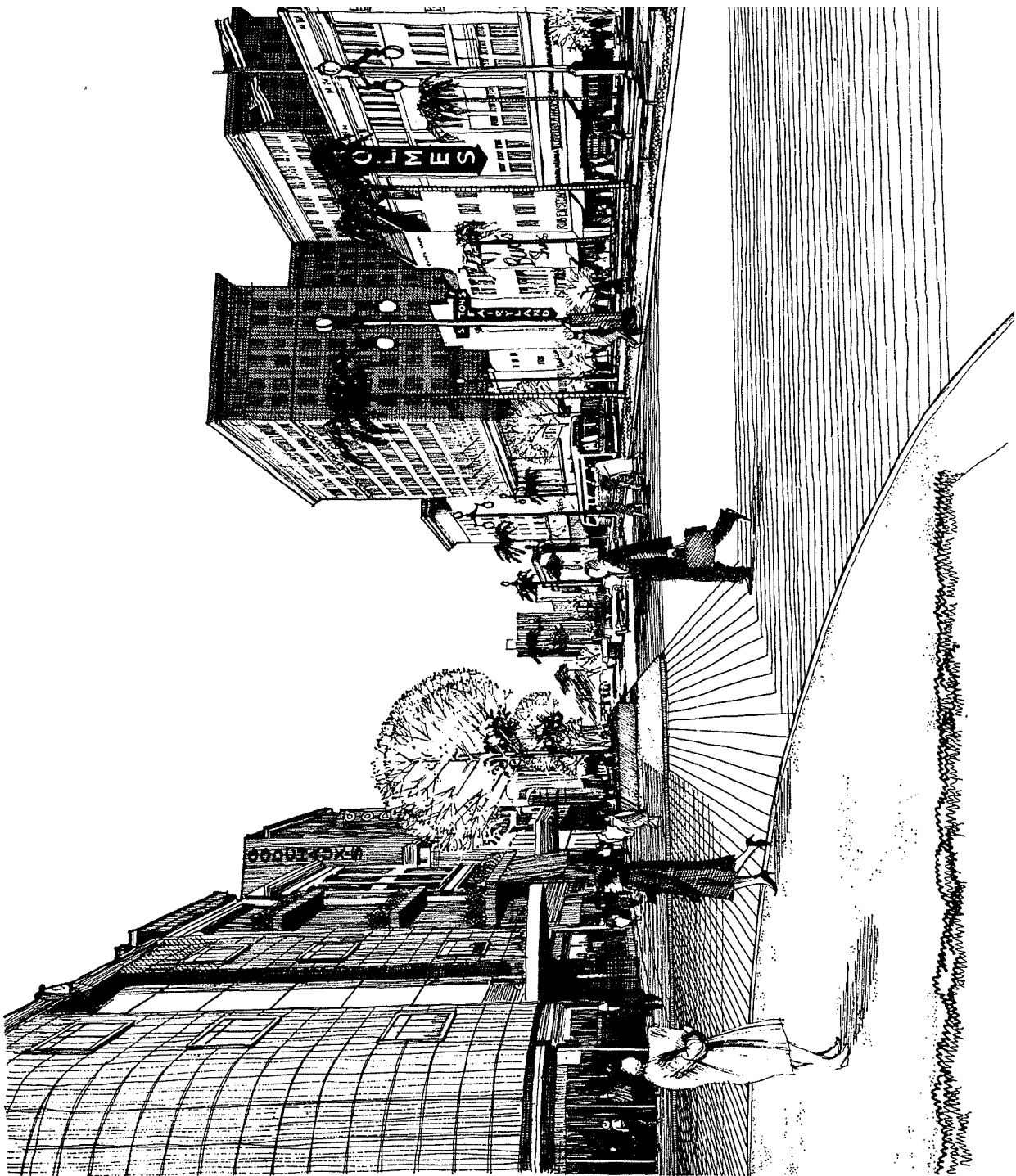
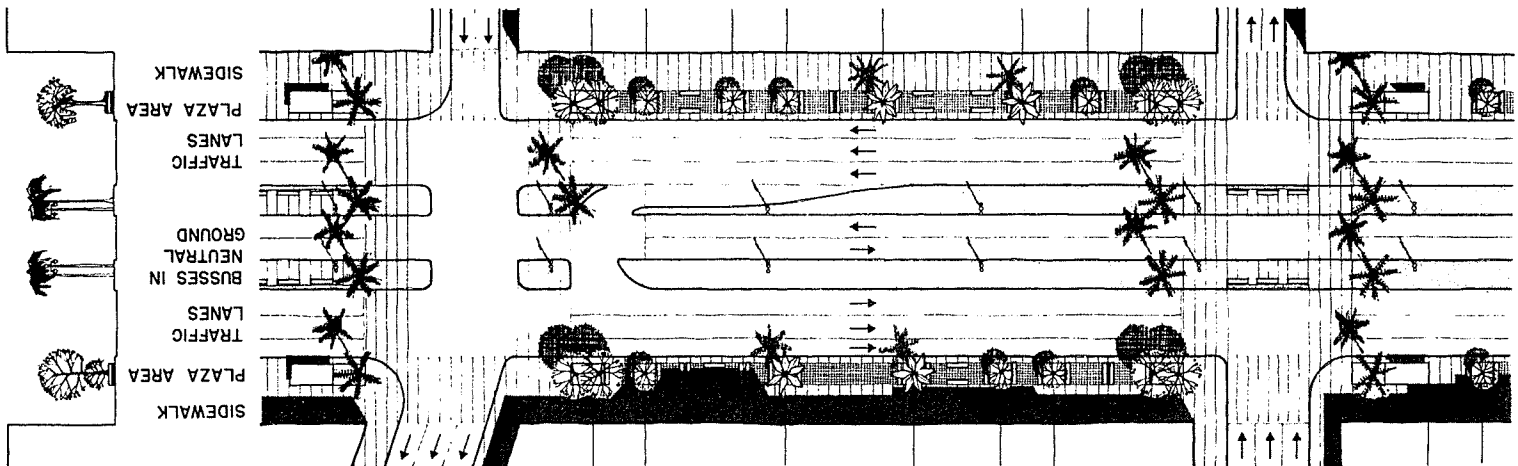
Problems and disadvantages associated with this alternative are:

- a) Elimination of curb parking and widening of the sidewalks would maintain the number of moving traffic lanes in each direction at three, one of which would be used for transit loading. This would result in a reduction of vehicular carrying capacity of Canal Street, but Canal Street never operates with more than three moving lanes in one direction, and the outside lane during peak hours is limited to the rate of movement of the buses in that lane.
- b) Elimination of curb parking and the effective reduction in traffic lanes would require the elimination of truck loading zones on Canal Street and the provision of suitable alternative facilities.
- c) The possibility of significantly improving the flow of transit is questionable since the buses operating on the neutral ground are already moving at near



Illustrative Plan

METHOD "A": GROUND LEVEL





- minimum headways during peak hours and the buses which turn on Canal Street would be required to maneuver within a reduced area.
- d) There is no provision for the inclusion of rapid transit into the mass transit terminal area along Canal Street.
 - e) Elimination of some cross-street traffic movements would increase the number of turning movements onto Canal Street. It should be noted that this proposal was made prior to the cancellation of the Riverfront Expressway project which was designed to remove cross-town traffic from Central Area streets. Without this or a similar cross-town facility in operation, it would not be possible to close any of the Canal Street crossings.
 - f) Also dependent upon the Riverfront Expressway is the development of Iberville-Bienville Streets as a parallel traffic artery. Even before the cancellation of the Expressway project, it was decided not to allow entrance or exit ramps within the Vieux Carre. Therefore, this part of the proposal could not be implemented.

ALTERNATE NO. 2

This proposal is Method "B" described in Guidelines Paper No. 8. Its essential features include:

- a) Provision of a continuous elevated roadway along each side of Canal Street over existing sidewalk areas for bus movement and passenger loading.
- b) Eliminate neutral-ground bus operation.
- c) Eliminate curb parking.
- d) Widen the sidewalks substantially and narrow the neutral ground.
- e) Maintain three moving traffic lanes in each direction.

Some of its advantages are the following:

- a) This proposal would improve transit access and movement in the Central Area.
- b) It would reduce walking distance between curbs on each side of the neutral-ground.
- c) It would provide opportunities to create direct transit access into adjacent buildings.

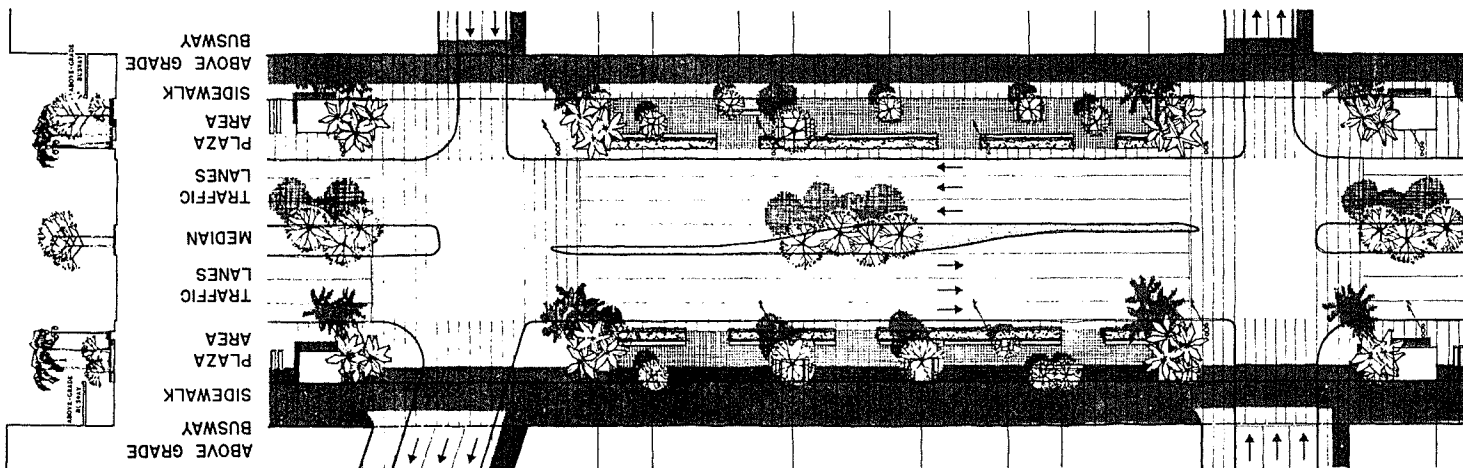
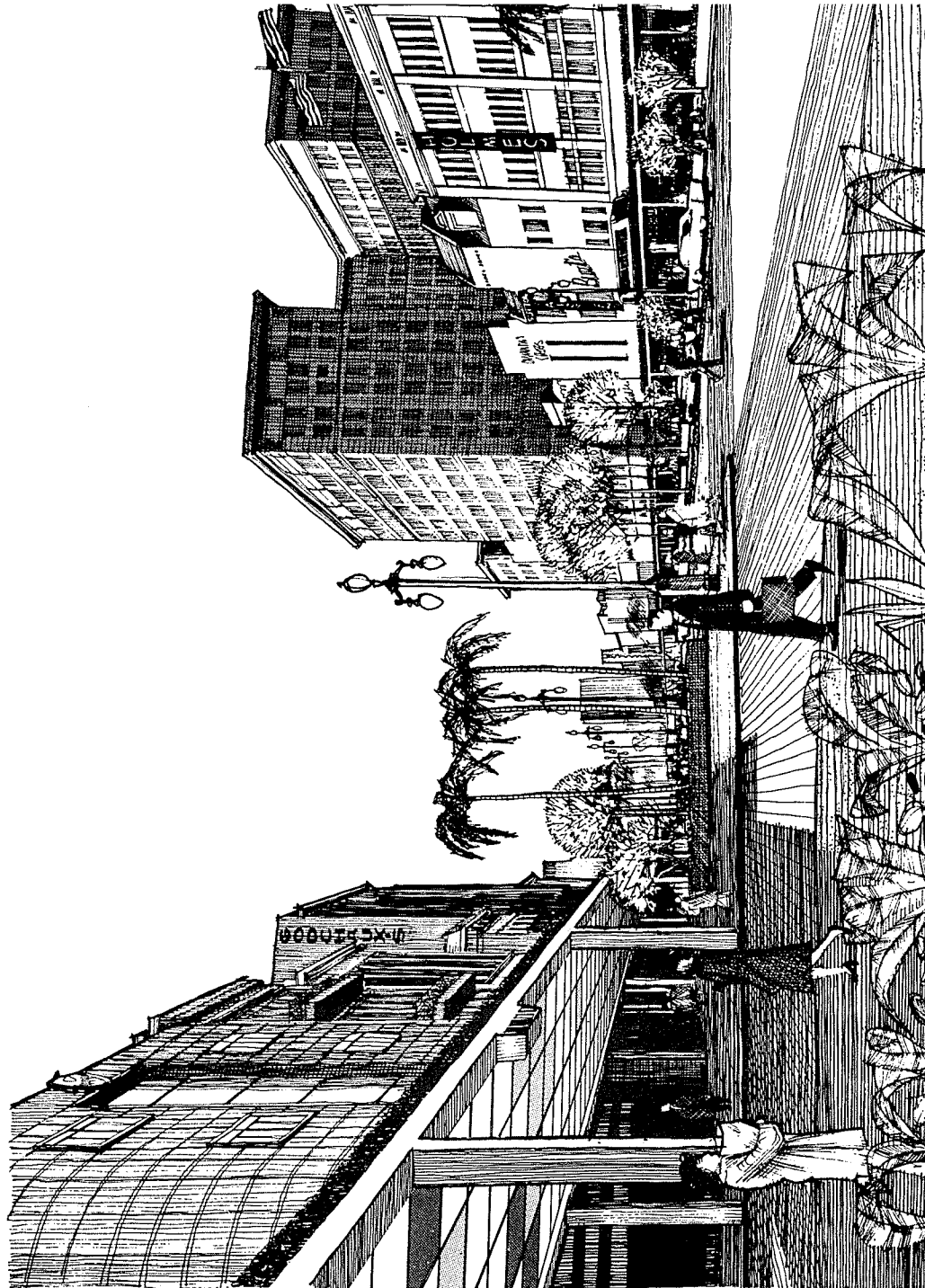
Problems and disadvantages associated with this alternative are:

- a) Any structure, whether designed for existing heavy conventional equipment or for some anticipated lighter vehicle would interpose a relatively bulky horizontal element across the facade of every building along



METHOD "B": ABOVE-GRADE BUSWAY

Illustrative Plan





both sides of Canal Street. Because of the great variety of building sizes and architectural styles, it would be extremely difficult to design a structure that would be compatible with every building.

- b) The necessity to provide ramps or turn-around loops in the vicinity of the Custom House building and at the Claiborne Avenue intersection would not be compatible with proposed development in those areas.
- c) While it might be possible to eliminate the neutral-ground bus operation, it would still be necessary to maintain considerable ground-level transit thereby creating a vertical separation in transit operations.
- d) Although it would provide the opportunity to create direct transit access into buildings, this would benefit some businesses, but it might be deleterious to others.

ALTERNATE NO. 3

This proposal is Method "C" - Underground Pedestrian Plazas and Bus Subway described in Preliminary Reports 1 and 3 of the Canal Street Project. Its essential features include:

- a) Provision of a bus subway beneath the neutral-ground of Canal Street to serve the Canal Street route and all express bus routes. Passenger terminals could serve the dual function of underground pedestrian crossings.
- b) Eliminate neutral-ground bus operations.
- c) Eliminate curb parking.
- d) Redesign ground level through redistribution of neutral-ground space.
- e) Maintain three moving lanes of traffic in each direction.

Some of its advantages are the following:

- a) It would provide a substantial net increase in area at the ground level which could be distributed to other uses.
- b) It would provide a controlled environment for access to some transit routes and an unobstructed pedestrian crossing of Canal Street.
- c) It would provide the opportunity for rapid transit access to the central core area without interfering with surface transit or vehicular and pedestrian traffic.
- d) It would provide additional space for small shops, concession stands and advertising which would help finance the project.



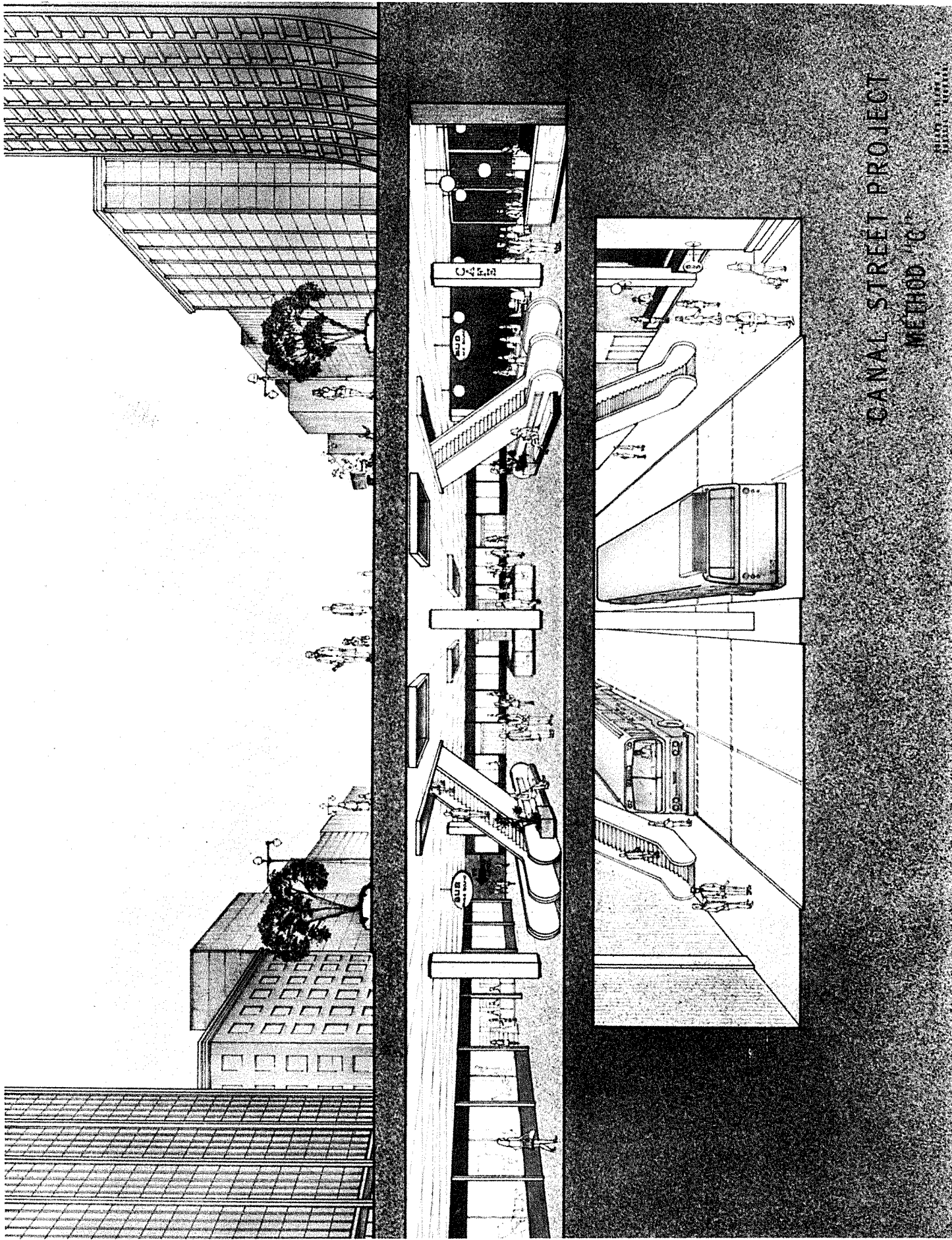


FIGURE NO. 22



Problems and disadvantages associated with this alternative are:

- a) This proposal requires the pedestrian to make several vertical movements when either crossing Canal Street or utilizing transit buses.
- b) It requires the pedestrian to move underground which in some cases produces adverse psychological problems.
- c) Construction would be more expensive and more disruptive to existing activities than other proposals.
- d) Particularly critical are the problems of utility relocation and the necessity to provide water-proofing and ventilation for the underground facilities.

ALTERNATE NO. 4

This proposal is Method "D" - Overhead Pedestrian Walks described in Preliminary Report No. 1 of the Canal Street Project. Its essential features include:

- a) Eliminate crossing movements at Royal-St. Charles, Bourbon-Carondelet, Dauphine-Baronne, and possibly Burgundy-University Place.
- b) All right turn movements, existing U-turns, and no left turn restrictions would be continued.
- c) Re-allocate right-of-way on each side of Canal Street to 29 feet for sidewalks, 34 feet for roadways.
- d) The 34 foot roadway would include an exclusive bus curb lane.
- e) Provide second level pedestrian walkways over existing sidewalks with pedestrian bridges crossing Canal Street.

Some of its advantages are the following:

- a) It provides the opportunity for uninterrupted pedestrian movement across Canal Street and longitudinally along each side.
- b) The elimination of vehicular crossing movements at the three or four Canal Street intersections would stop much of the through traffic from using Vieux Carre streets.
- c) The separation of pedestrians from vehicles would greatly improve the flow of vehicular traffic.
- d) Creation of second level pedestrian space would effectively increase the amount of prime retail space by opening the second floors of many small buildings to direct pedestrian traffic.

Problems and disadvantages associated with this alternate are:

- a) Closing the Canal Street crossings would increase the number of turning movements onto Canal Street. It would also inconvenience much legitimate local

traffic. Cancellation of the Riverfront Expressway project which was designed to remove crosstown traffic from Central Area and Vieux Carre streets prevents the implementation of this proposal.

- b) Creation of a second level pedestrian crossing forces additional effort onto the pedestrian in moving up and down to utilize the facility. Many pedestrians would still choose to cross Canal Street at ground level thereby weakening the advantages gained by separation.
- c) As with the elevated bus roadway in alternate no. 2, a substantial structure would be required. Although not as bulky as the bus roadway, the introduction of bridges across Canal Street would be objectionable to many people from an aesthetic standpoint.
- d) Not all businesses would benefit equally by the opening of access to the second level of adjoining buildings.

These four proposed transportation alternatives were discussed at length by representatives of the City Planning Commission staff and New Orleans Public Service, Inc., the City Traffic Engineer, and members of the Canal Street Task Force of the Central Area Council. None of the four alternatives were completely acceptable to all participants in the discussions. In addition, the subsequent cancellation of the Riverfront Expressway made some features of Alternates 1 and 4 unworkable.

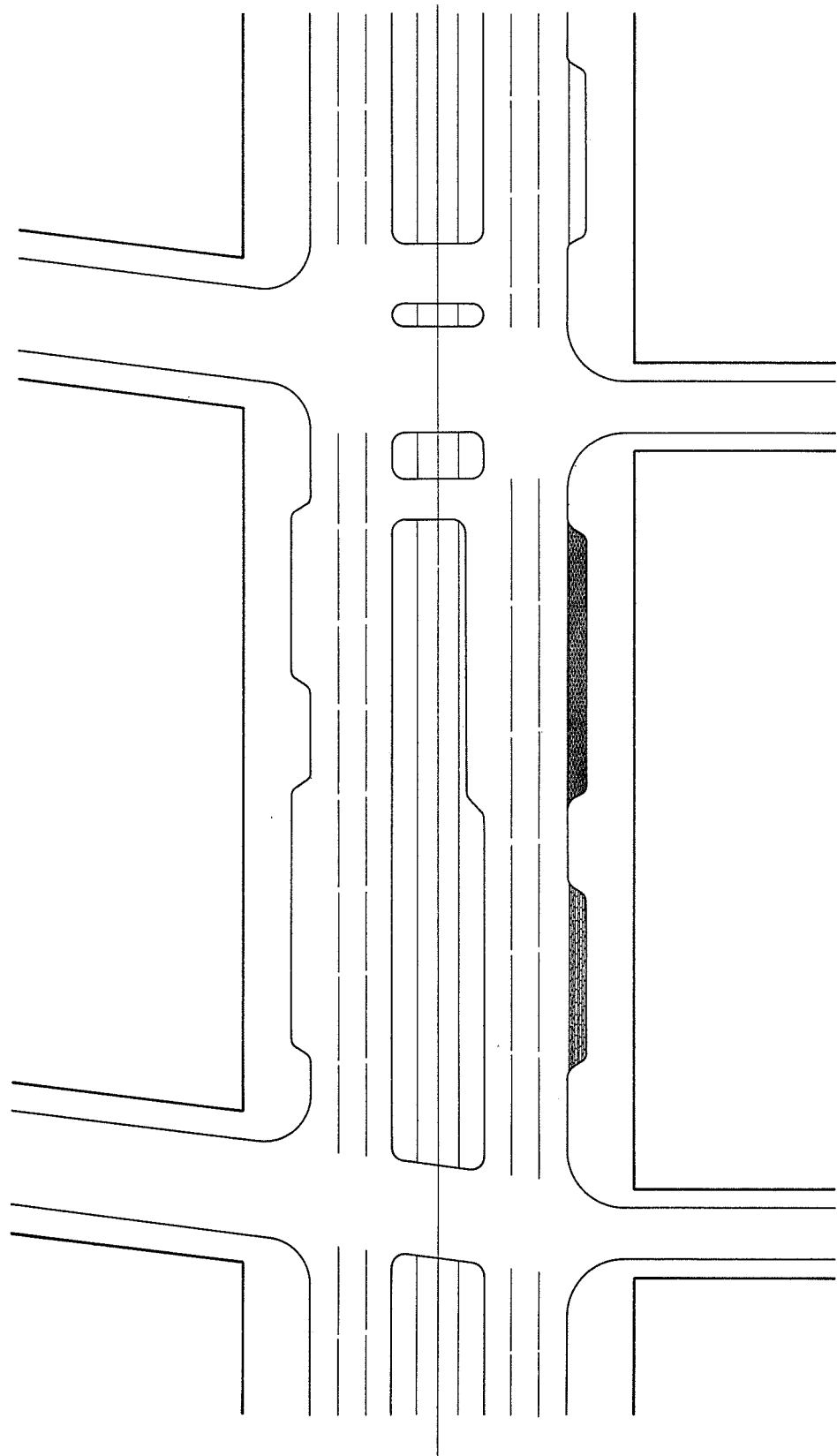
ALTERNATE NO. 5

In order to continue the search for an acceptable solution to the transportation problem, a fifth alternative was formulated. The objective of this proposal was to develop a plan of minimum traffic improvements for Canal Street that would satisfy two basic requirements. First, the scheme would provide a minimum cost solution which would hopefully improve transit service and pedestrian circulation while providing a more pleasant atmosphere. It is quite possible that this is all that is warranted at the present time, particularly if the future needs cannot be evaluated accurately enough to justify a more costly and elaborate improvement scheme. Secondly, the minimum scheme provides an improvement that might be immediately implemented to serve as an interim solution during the lengthy planning, design, financing and construction of an alternative plan.

The minimum traffic improvement scheme consists of eliminating the eight foot parking lane by incorporating it into the sidewalk leaving 3 - 11 foot lanes for moving traffic with the outside lane becoming an exclusive bus lane. The additional eight feet of sidewalk will provide room for bus stops, planters and loading and emergency service zones. See Figures 17 and 18.

The existing neutral ground bus roadway will not be affected by this scheme. The added exclusive bus lanes will service the downtown and uptown bus routes presently terminating on

CANAL STREET PROJECT



**TYPICAL CURB LOADING BAY
AND TRANSIT WAITING ZONE**

INTERIM SOLUTION



Canal Street. It is possible that these routes, particularly those traversing the Vieux Carre, might be rerouted with regard to the crosstown streets utilized, but it is anticipated that Canal Street will continue to serve as a terminal whether or not the uptown and downtown bus routes use one block or several blocks along Canal Street. Some of its advantages are the following:

- a) It will reduce pedestrian crossing distances and times.
- b) It will improve transit travel times and increase vehicular speed.
- c) It will provide a more pleasant pedestrian atmosphere and improve some necessary truck loading space.

Some problems and disadvantages are the following:

- a) The scheme does not satisfy the need for more efficient mass, rapid transit. It is at best a temporary solution and should not be considered permanent.
- b) Some resistance is anticipated from truckers, merchants and other commercial vehicle operators presently using the curb space on Canal Street for parking, but the loading and service zones provided behind the curbline should adequately handle all legitimate loading requirements. However, in blocks where large-scale development takes place, off-street loading areas should be provided and the street-side loading zones eliminated. Eventually all of the special street-side loading zones would be eliminated.
- c) The reduction of the number of moving lanes for vehicular traffic would reduce the street capacity, but Canal Street never operates with more than three lanes in one direction, and the outside moving lane during peak hours is limited to the rate of movement of the buses in that lane.

It should be noted that traffic congestion in the Central Business District does not generally occur along Canal Street, but occurs on the cross streets leading to major approach arteries and expressway ramps.

Table I indicates the existing and future traffic capacities and the 1967 traffic volumes for the critical section of Canal Street.

TABLE I

CANAL STREET
TRAFFIC VOLUMES AND CAPACITY

Intersection	1967 Traffic Count		Present Capacity ¹	Future Capacity ²
	P.M. Peak Hour		3 Moving Lanes	2 Lanes + Bus Lane
	<u>Straight Right Turn</u>			
	<u>TOWARD RIVER</u>			
University	726	No Turn	1550	1190
Baronne	643	376	1360	1190
Carondelet	569	No Turn	1520	1170
St. Charles	519	229	1370	1190
	<u>TOWARD LAKE</u>			
Royal	883	No Turn	1560	1190
Bourbon	904	208	1520	1110
Dauphine	882	No Turn	1570	1200
Burgundy	1008	148	1420	1160

¹ Present capacity based on 41 ft. width with 3 - 11 ft. moving lanes, 0.3 load factor, Canal Street green signal 50% of time.

² Future capacity based on 2 - 11 ft. traffic lanes, 11 ft. bus lane, 0.3 load factor, Canal Street green signal 50% of time. Capacity includes 45 buses per hour in bus lane. Right turning vehicles allowed to use curb lane.

It should be noted that traffic congestion in the Central Business District does not generally occur along Canal Street, but occurs on the cross streets leading to major approach arteries and expressway ramps. Table J shows the comparison between 1957 peak hour traffic volumes on Canal Street and the 1967 values.

TABLE J

CANAL STREET - TRAFFIC VOLUMES
COMPARISON BETWEEN 1957 and 1967
PEAK HOUR TRAFFIC VOLUMES (4:30 - 5:30 P. M.)

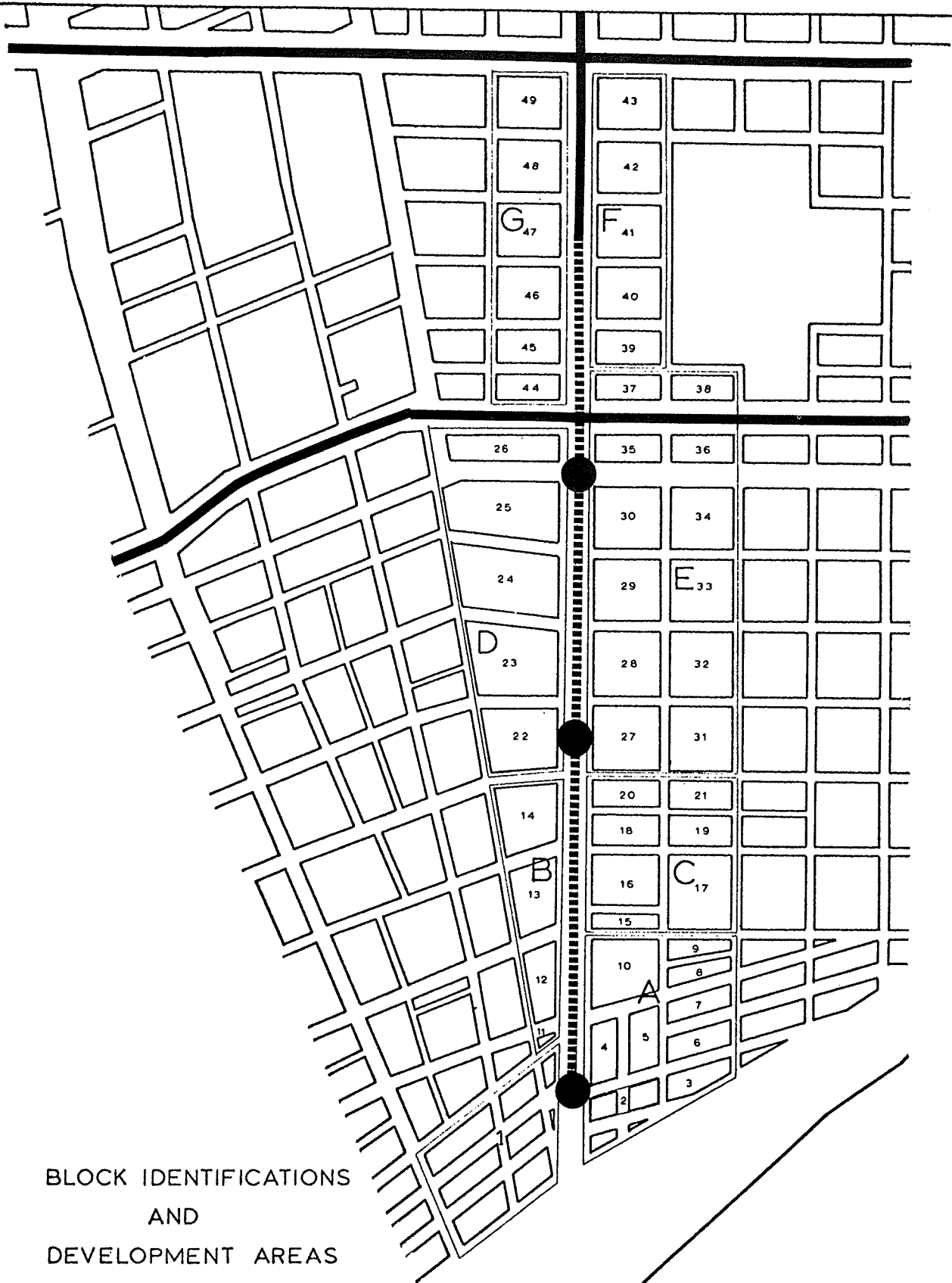
Direction	Location Mid-Block Between	1957 ¹	1967	Difference
Lake Bound	Exchange Pl.-Royal	725	883	+158
	Royal-Bourbon	1021	1112	+ 91
	Bourbon-Dauphine	1221	882	-339
	Dauphine-Burgundy	1405	1156	-249
	Burgundy-Rampart	1238	1234	- 4
River Bound	Rampart-University	1205	726	-479
	University-Baronne	855	1019	+164
	Baronne-Carondelet	678	643	- 35
	Carondelet-St. Charles	884	748	-136
	St. Charles-Camp	505	519	+ 14

¹Source. Wilber Smith and Associates, A Traffic Improvement Plan for Canal Street, New Orleans, Louisiana, 1957.

The demise of the Riverfront Expressway and the recent interest displayed by the federal government in assisting large metropolitan areas to develop more effective mass rapid transit systems justifies a renewed interest in Alternate No. 3, Underground Pedestrian Plazas and Bus Subway. This proposal was originally passed over because of the very high financial investment required from local sources and because of the disruptive effects that construction would have on businesses and utilities. However, considering the long-term advantages that would result from this proposal and the possibility of substantial federal assistance in financing such a project, a more thorough analysis of the proposal was made. It should be emphasized that this proposal cannot be justified on the basis of only improving Canal Street traffic conditions, but it must be viewed as the major terminal of a metropolitan rapid transit system operating over reserved rights-of way.

The following discussion is an attempt to outline the problems and explore the advantages of providing a bus subway under the center portion of Canal Street. Figure 19 shows the extent of one possible configuration of such a facility. Starting from an underground terminal in the vicinity of the Rivergate Exhibition Center, the subway tube would extend to a point about midway between Loyola Avenue and Claiborne Avenue where it would rise to ground level. In addition to the terminal station at the Rivergate, there would be one or two





CANAL STREET PROJECT

FIGURE NO. 19

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intermediate stations depending on cost and the degree of flexibility desired for passengers and pedestrians. Figures 20 and 21 show typical plans and a cross section for the arrangement of passenger station and subway tube.

The purpose of this facility would be to serve as a relief to the present and future competition for space at ground level between pedestrians and private, public and commercial vehicular traffic. It is recognized at the outset that serious questions of technical and economic feasibility exist, but only a thorough discussion of the various facets of the problem will provide a basis for a final determination.

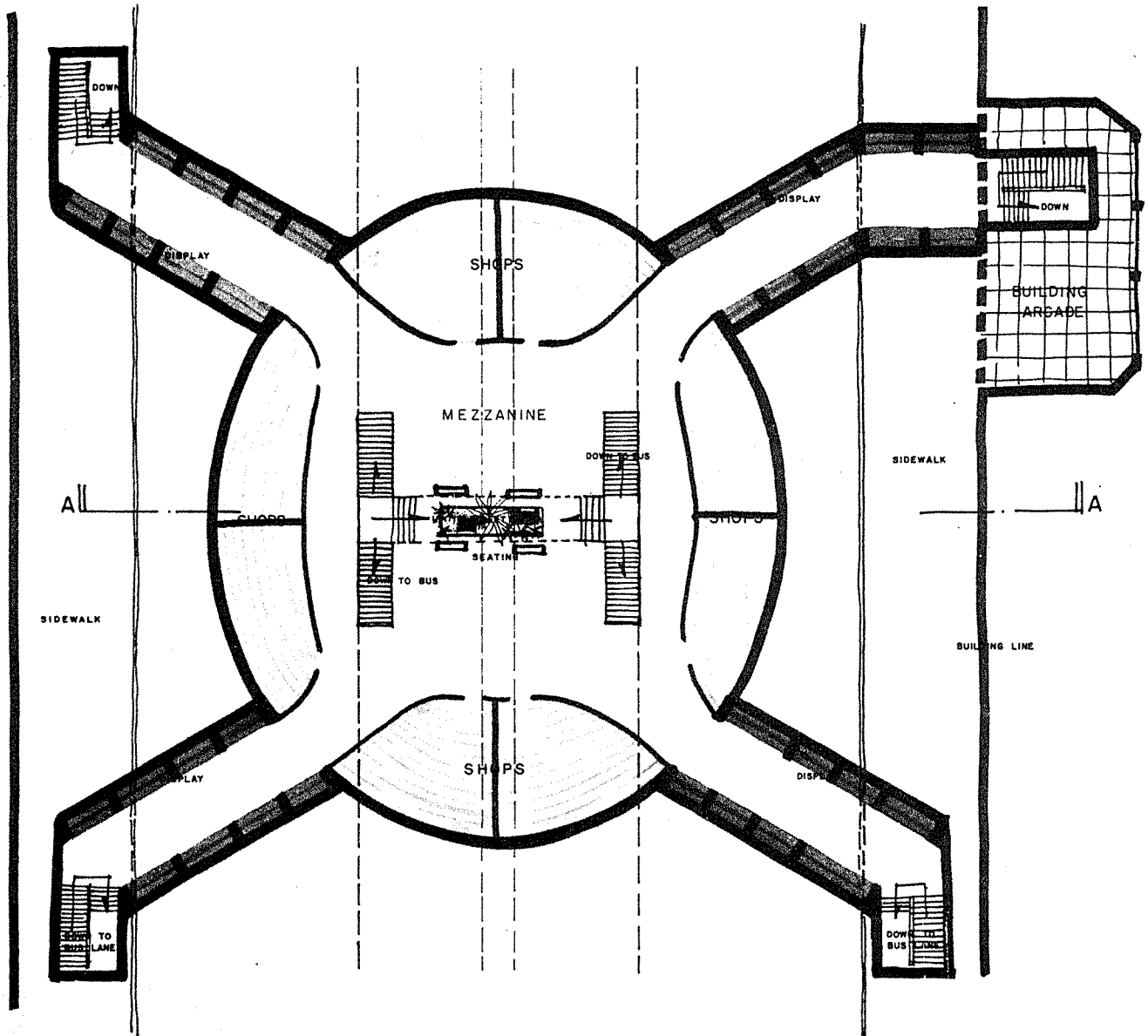
If something more than a superficial cosmetic treatment of the landscape is to be achieved, there must be a net realization of space at the ground level or at the level of maximum activity. If there is to be no reduction of existing traffic capacity, then there must be some vertical separation of existing functions. If elevated transit lanes or pedestrianways are ruled out for aesthetic reasons, then a bus subway might be substituted for neutral ground bus lanes. This subway would be used by the present Canal Street line and all express bus routes.

Furthermore, since the pedestrian is also frequently a transit user, the passenger stations could be combined with underground pedestrian crossings to provide a dual function. Such a facility is suggested in Figure 22. As previously discussed and with some elaboration, the advantages of this proposal are the following:

- a) It would provide an all-weather, uninterrupted crossing of Canal Street at two or possibly three strategic locations in the central core area. Since the unpleasant prospect of crossing Canal Street during the rush hour and in adverse weather is one of the most often heard complaints of both worker and shopper, this facility would have great appeal.
- b) It would free the neutral ground space for redistribution into a more equitable allocation of space among pedestrian, surface transit, and private and commercial vehicles. Sidewalks could be widened and an exclusive curb transit lane could be provided without reducing the number of existing moving traffic lanes. Whatever surface pedestrian traffic remained would be helped by the reduced overall crossing distance and the absence of neutral ground transit conflict.
- c) The underground pedestrian plazas would provide additional space for small shops, concession stands, automatic self-service post offices, visitor information centers, entertainment information and ticketing centers, and advertising displays which could contribute to the financing of such facilities.



PLAN



CANAL STREET PROJECT

SECTION A

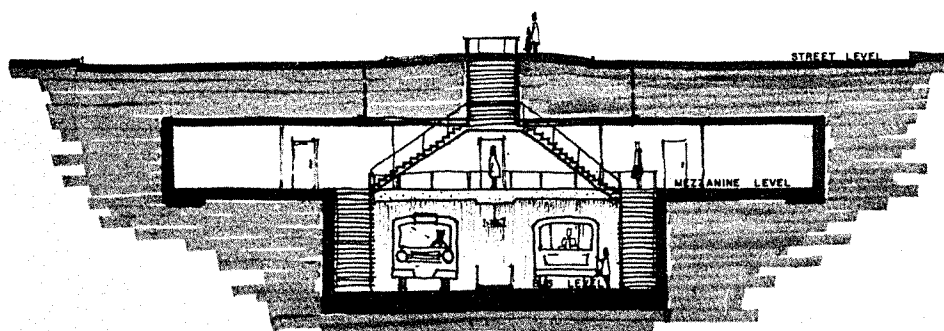
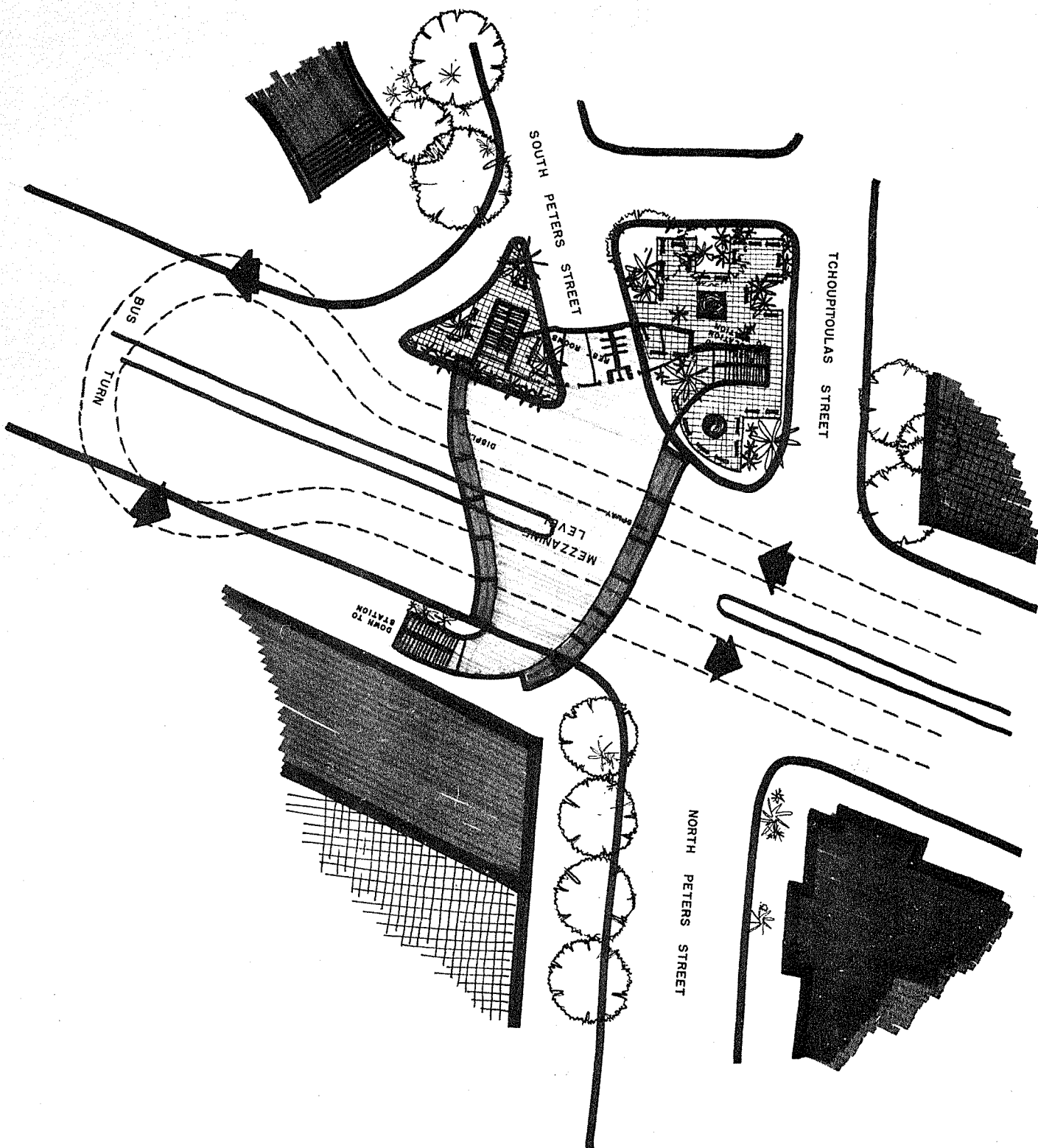
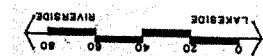


FIGURE NO. 20



CANAL STREET PROJECT

FIGURE NO. 21





d) Above all, it would provide the key element in the core area terminal of a rapid transit system and that is non-interference with the pedestrian and surface vehicular traffic. Without this element a rapid transit system cannot operate efficiently within the congested core area and therefore cannot compete effectively with the private automobile as a means of travel to the CBD.

The arrangement of the various functional elements of the proposed system has many variations. For this discussion, the following basic system elements are pertinent.

- a) Subway tube.
- b) Transit passenger loading area.
- c) Pedestrian plaza and shopping area.
- d) Surface access.

While the potential benefits of this proposal are undoubtedly substantial, the problems which result from it are no less significant. The following discussion attempts to define the scope of these problems. Their ultimate solution would require a much more detailed analysis.

An underground subway-pedestrian crossing system must compete for space below ground level with existing utility systems and is subject to some unfavorable natural conditions. The existing utility systems which are involved include:

- a) A primary drainage system, shown in Fig. 23.
- b) A secondary drainage system.
- c) Gas, water, and electric power systems.
- d) Communications systems.

The unfavorable natural conditions are the relatively soft soil of this region and a constantly high water table.

The greatest conflict arises between the primary drainage system and the most desirable location of the underground circulation system. The covered drainage culverts beneath Camp Street and Chartres Street join together at the Canal Street intersection and proceed away from the river in a larger culvert beneath the roadway on the Vieux Carre side of Canal Street. This culvert proceeds along Canal Street until it intersects another underground drainage culvert which crosses Canal Street at Elks Place-Basin Street. From this point, the flow proceeds to a pumping station located behind the Municipal Auditorium. Another subsurface drainage culvert crosses Canal Street at Claiborne Avenue. However, the proposed bus subway would have reached ground level riverward of this point and no interference would result. Fig. 24 shows a typical cross-section of the drainage culvert. It



CANAL STREET PROJECT

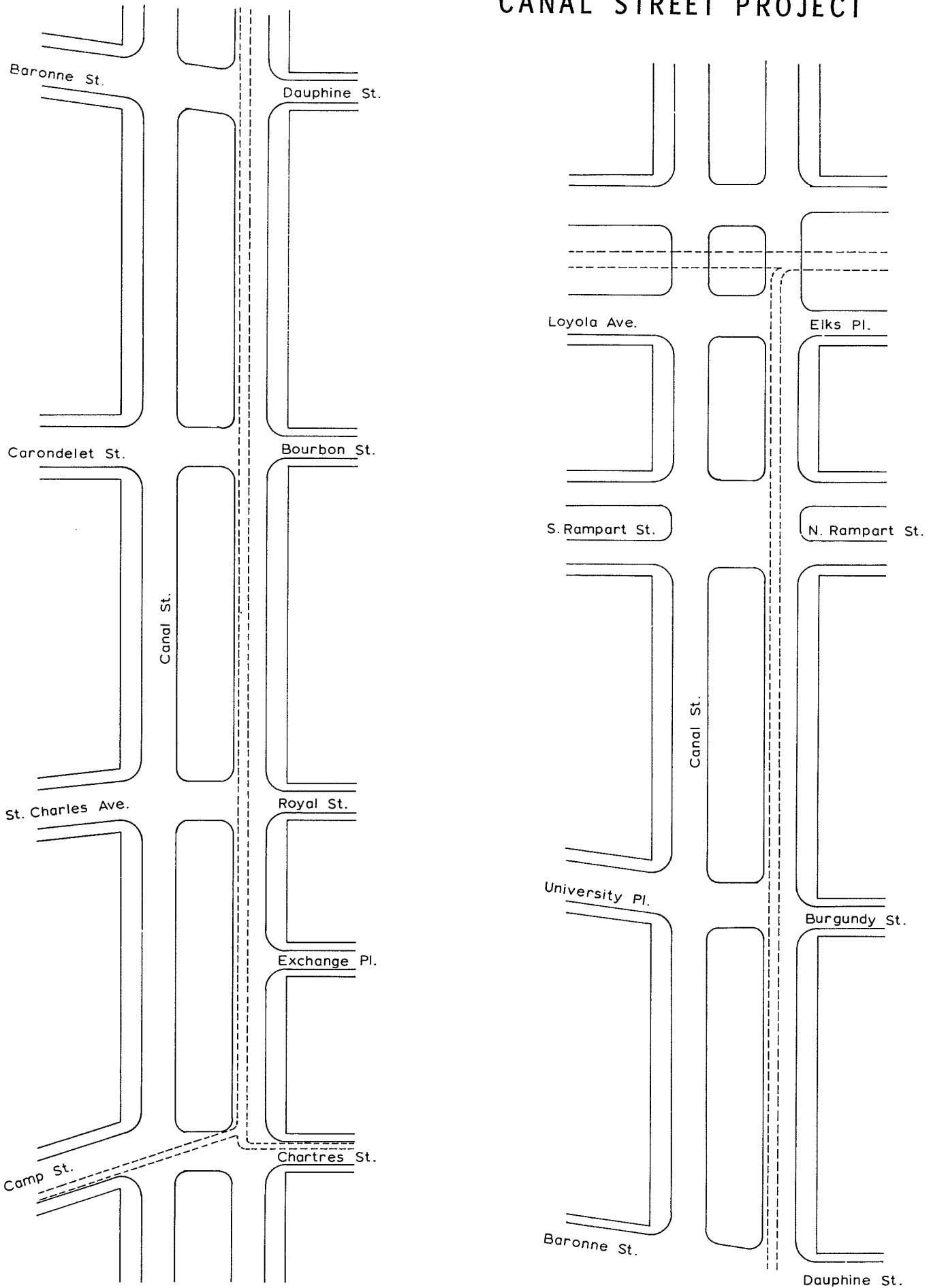
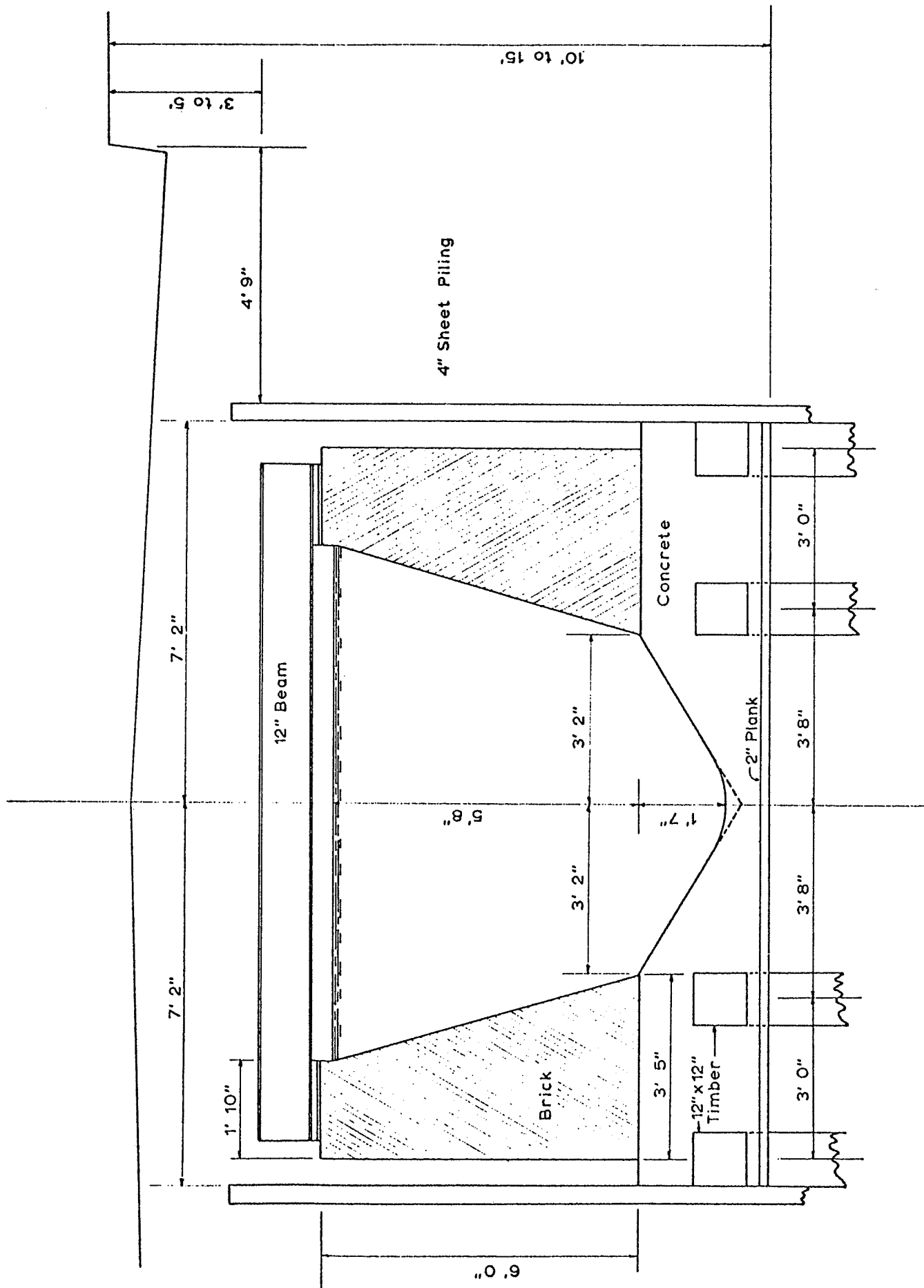


FIGURE NO. 23





CANAL STREET PROJECT

FIGURE NO. 24



can be observed that the zone between 3 to 5 feet below ground surface and 10 to 15 feet below ground surface cannot be used for the crossing of Canal Street unless the culvert is re-located. It would be impractical to locate the pedestrian plaza and bus subway entirely below the subsurface drainage culvert.

Several alternate arrangements are suggested, but a much more thorough study should be made.

- 1) The Chartres Street culvert could be turned at Iberville Street and continued to the intersection of the Basin Street culvert. Likewise, the Camp Street culvert could be turned at Common Street and continued to the Loyola Avenue intersection. This would eliminate the Chartres-Camp crossing and the entire Canal Street length of culvert. The Elks Place-Basin Street crossing would remain requiring the bus subway to pass below it. The alternate to this would be to turn the Loyola Avenue culvert at Tulane Avenue and proceed along Tulane Avenue to Claiborne Avenue. This would require an analysis of the ability of the Claiborne Avenue facility to handle this combined flow.
- 2) The Chartres Street and Camp Street culverts could be turned riverward and pumping facilities provided to discharge into the river. The Elks Place-Basin Street culvert could be turned at Tulane Avenue and continued to the intersection at Claiborne Avenue.

Other alternatives which might provide a more acceptable solution should be explored. It is evident, however, that the bus subway-pedestrian crossing proposal cannot be implemented unless, at least, the Canal Street subsurface drainage culvert is relocated. It is recognized that the abandonment of this facility will result in considerable readjustments in the secondary drainage system.

Another problem of considerable significance would be the actual construction of the subway tunnel and pedestrian plazas. Because of the extent of activity along Canal Street which must continue to function with a minimum of interruption, a rather complex sequence of construction would be required. This complexity would add significantly to the cost of the project. Among the significant construction problems which should be given specific attention are the following:

- 1) Method of construction used in placing the subway tunnel. The two most obvious methods of constructing the tunnel are:
 - a) Pure tunneling beneath the surface.
 - b) The "cut-and-cover" method.

The selection of which method to use depends upon a great number of factors. First, will the tunnel require piling either to support the vertical weight of the structure or to counteract the uplift forces due to the buoyancy of the structure. If piling are necessary, then the pure tunneling method would become extremely difficult. If the "cut-and-cover" method is the only feasible alternative, then the depth at which the tunnel is located becomes an important problem.

CENTRAL BUSINESS DISTRICT PARKING

The core area of the Central Business District is the focal point of the business life of the entire city. The activities carried on there include: financial, governmental, entertainment and tourism, retailing, and personal and professional services. These activities require the face-to-face contact between merchant and customer, client and advisor, patron and banker. Such contacts result in a great concentration of pedestrians in the core area. In order to insure the continued vitality of the CBD, these pedestrians should not be hampered by unnecessary traffic as they move about within the area.

The composition of traffic within the CBD consists of those vehicles which are simply passing through without stopping and those vehicles of which the driver and passengers are ultimately destined to some activity within the area. For the former group, the inner-outer belt system was proposed to divert this traffic from core area streets. This system has been weakened considerably by the cancellation of the Riverfront-Elysian Fields Expressway. In the latter case parking becomes an intermediate stop where the motorist becomes a pedestrian and proceeds to his ultimate destination. These parking facilities become the focal points for vehicular traffic destined to the CBD. The provision of additional core area parking spaces, either on-street or off-street, will attract or generate more traffic in an already congested area. Since the intensity of congestion is a direct function of the volume or density of traffic, the amount and location of these parking facilities vitally affects the functioning of the CBD vehicular circulation system.

The suggestion that improved street capacity and additional parking facilities will eliminate congestion and create increased patronage for the core's activities is often made by merchants in the area, particularly those competing with regional shopping centers. However, the provision of these additional parking facilities usually causes the opposite effect especially when they are located without regard for traffic flow patterns. The first group to use the new facilities is that group which will be coming downtown in any event, i.e., employees, shoppers seeking goods only available in the core area, etc. The effect is one of converting transit users into automobile drivers or riders without really affecting the economic activity of the area. Thus, the end result is decreased transit usage, increased traffic, increased land use for parking, more noise and air pollution, and an even less desirable core area.

Core area merchants cannot compete with shopping centers by trying to duplicate them. First, it is impossible to provide free parking for every potential customer because land

costs are too high. Second, even if free parking were possible, the shopping centers are closer to the customer's residence and involve shorter travel times over less congested streets. Last, the shopping center offers one-stop shopping for a broad range of merchandise which allows the customer to make a number of different purchases on the same trip as the weekly marketing excursion.

The above does not imply that the core area is dead or dying, but rather that its functions are changing. Successful CBD merchants will adjust to these changes and compete on the basis of their strength rather than their weakness.

The strength of the core is that it is the most exciting part of the city. Every day large numbers of employees enter the area and provide the largest and wealthiest group of potential customers in the city. Visitors and tourists stay in or near the city center. The Vieux Carre contains large numbers of residents who prefer to live near the core. Hopefully, other areas around the core can be encouraged to develop residentially.

Certainly there is a parking demand by the above groups, but this demand must be satisfied by facilities on the fringe and not within the core area. Exactly what constitutes the core area is uncertain, but Canal Street, from North Peters - Tchoupitoulas Streets to Rampart Street is part of the core, and parking garages in this area should be restricted.

In the summary of conclusions and recommendations of the Economic and Market Survey of the Central Business District the consultants noted "decreases in the use of public transit despite an extensive modernization program." This condition becomes more significant in view of the present philosophy of permitting parking structures to locate indiscriminately within the core area of the CBD. If this policy is continued, the situation with respect to public transportation, in our judgment, will only deteriorate. As an alternative, we recommend a system of peripheral parking garages and the inauguration of a convenient shuttle bus service to link these garages to the core area.

Major parking facilities should be encouraged to locate in the following general areas:

- a) Location I - The area bounded by Canal St., No. Peters St., Bienville St. and the railroads along the river-front.
- b) Location II - The area bounded by Canal St., South Peters St., Poydras St., and Tchoupitoulas St.
- c) Location III - The area bounded by O'Keefe Ave., Gravier St., South Rampart St., and Julia St.

- d) Location IV - The area along Cleveland Street from Saratoga St. to South Claiborne Avenue.
- e) Location V - The area along Iberville St. from Crozat St. to North Claiborne Avenue.

In addition, the parking facilities of the proposed Dome Stadium and the Cultural Center could be used for daytime parking for CBD workers if convenient shuttle bus service were provided.

The connecting linkage between the parking facilities and the CBD core area should be made by a shuttle-bus transit system composed of three loops.

- a) Loop I - Canal Street from Claiborne Avenue to the River.
- b) Loop II - Canal Street, St. Charles Avenue, Howard Avenue, and O'Keefe-University Place.
- c) Loop III - Basin-Loyola, Poydras St., O'Keefe-University Pl., Burgundy St., Dumaine St., Marois St.

Loop I would provide a distribution service along Canal Street and service parking Locations I, II, IV, and V. Loop II would provide a distribution service between Canal Street and Howard Avenue. It would primarily serve parking Location III. Loop III would serve the parking facilities of the Cultural Center and the Dome Stadium, as well as Location III. The location of these parking facilities, outside of the core area, but not so far away as to be ineffective, could all serve dual functions.

Location I, while serving the core area during the day, could provide night-time parking for the Vieux Carre.

Location II could serve both the core area and the River-gate Exhibition Center during each respective peak period.

Location III could serve the core area during the day, and provide the needed supplementary parking for the proposed Dome Stadium.

Location IV and V could serve both the core area and the proposed enlarged medical complex in the vicinity of Tulane Avenue and Claiborne Avenue.

In addition to these dual functions of the parking facilities themselves, the shuttle transit loops would have several functions.

Loop I could provide a convenient distribution function along Canal Street without hampering normal transit service.

Loop II would provide a convenient linkage between the proposed Central Area residential development in the area bounded by Poydras, St. Charles, Howard, and O'Keefe Streets and the core area shopping and office activities.

The shuttle transit loops would necessitate the designation of curb lanes along their routes as exclusive transit lanes and the corresponding elimination of curb parking.

CONCLUSIONS AND RECOMMENDATIONS

From the material contained in this report, two fundamental conclusions emerge which require immediate attention.

1. The first of these is the seemingly dormant state of regional transportation planning. Circumstances surrounding the collapse of the Riverfront Expressway project, confusion over the role to be played by local and regional planning agencies and the inability of the Regional Planning Commission to obtain full funding for an immediate regional transportation study have brought transportation planning for the New Orleans metropolitan area to a virtual halt. Action should be taken immediately to clarify the roles of respective planning agencies with respect to regional transportation planning. In addition, all civic and governmental forces should be mobilized to secure immediate funding of a regional transportation study. Without such a study it is impossible to develop a valid concept for a regional transportation system. Without this concept, it is difficult to define the functional role which Canal Street would necessarily have in such a system of transportation. And, until this role is clearly defined and some implementation achieved, substantial improvements in the environmental quality along Canal Street will be delayed.

2. The second conclusion is the apparent inability of Canal Street property to share proportionately in the market for new construction. With the exception of the Marriott development, the Holiday Inn Motor Hotel, and a few scattered renovations, there has been practically no new construction along Canal Street within the core area. Although the present anticipated markets for office and retail space have apparently been satisfied, efforts should be undertaken immediately to assemble large development sites in anticipation of future market potential. Without these large-scale site developments it will be virtually impossible to solve many of the environmental problems which presently plague the Canal Street area.

3. In anticipation of Canal Street remaining as the focal point of the existing surface transit system and becoming the primary terminal of a regional mass rapid transit system, immediate action should be taken by affected utility companies and agencies to review their space requirements and relocation problems in the event that a subsurface transit facility becomes necessary along Canal Street.

4. A long range objective of CBD development should be to establish a system of peripheral parking around the central core area in order to minimize the necessity for complete penetration of this area by all vehicular traffic. In support

of this system, a shuttle bus service should be provided to connect these facilities with the core area. Included in this system would be the parking areas of the proposed Dome Stadium and the Cultural Center and the proposed improved passenger ferry service and the Rivergate facilities at the foot of Canal Street.

5. An immediate objective should be the total elimination of curb parking along Canal Street. Delivery and service truck operations should be minimized as much as possible during daytime work-hours. Complete elimination of delivery and service truck operations can be achieved only by providing off-street loading facilities within each block. In most cases this is possible only when large-scale development takes place. Without this type of facility, various alternatives should be considered. Among these are the following:

- a) In each block where off-street loading facilities are not available, a space could be provided for short-term (5-10 minutes maximum) delivery trucks and emergency vehicles.
- b) Long term deliveries should be scheduled during other than daytime working hours.
- c) Long term service vehicles should be provided with parking space in off-street parking facilities within the core area.

6. Special attention should be given to the redefinition of the functional role of Iberville Street. Large department stores should assume a leadership role by removing their service activities from Iberville Street to the service buildings between Iberville and Bienville Sts. A new concept for Iberville Street should emphasize its role as the front door to the Vieux Carre rather than the back door of Canal Street.

7. In order to facilitate pedestrian movement between large pedestrian generators, second level bridge crossings of streets should be considered. For the present, pedestrian connectors between large department stores would be in order. As more large-scale development takes place a more complete second-level pedestrian circulation system could be developed.

8. Immediate action should be taken to complete the Spanish Plaza installation and the area between the International Trade Mart building and the Rivergate Exhibition Center. The ferry terminal building should be renovated in connection with improved passenger ferry service to the West Bank.

9. A significant improvement in environmental quality could be achieved through a program of basic housekeeping and attention to minor detail. Particular attention should be given to those objects which have been given the privilege of occupying public space such as overhead signs, sidewalk

vending machines, etc. Civic pride and the responsibility of leadership should motivate the newspapers to critically evaluate their Canal Street vending operations and seek a more attractive design for self-service vending machines and less obstructive vendor locations. The Post Office Department should be requested to review its Canal Street facilities with regard to the number and location of boxes and to explore the possibility of installing its most modern and attractive equipment. Coordination between all users of sidewalk areas is paramount in creating an orderly environment along Canal Street.

10. Perhaps the single most damaging element to the Canal Street environment is the current procedure of trash disposal. An almost daily occurrence are the piles of empty cardboard boxes which line the curbs along Canal Street during the most active hours of the day. In terms of environmental quality, this situation is intolerable and immediate action should be taken to formulate more acceptable trash disposal procedures throughout the central core area. Also noticeable is the deterioration in the practice of periodic cleaning of sidewalks in front of many stores along Canal Street. More effort in this area would do much to restore the character of Canal Street.

11. A systematic program aimed at removing superfluous signs and other appurtenances from store fronts should be inaugurated. Vigorous support for the sign regulations of the proposed zoning ordinance would bring substantial improvement to the environmental quality of the Canal Street area.



APPENDIX A
VIEUX CARRE TRANSIT OCCUPANCY STUDY



VIEUX CARRE
TRANSIT OCCUPANCY STUDY - SEPTEMBER, 1967

ROYAL STREET A.M.				BOURBON STREET P.M.			
Bus Stop	Board	Alight	Leaving on Board	Board	Alight	Leaving on Board	
			510				
Esplanade	16	8	518	1	3	165	Direction of Travel
Ursulines	15	5	528	1	2	167	
Dumaine	21	9	540	1	6	168	
St. Peter	4	10	534	2	3	173	
St. Louis	2	17	519	2	2	174	
Bienville	1	16	504	0	0	174	
Canal						174	
Totals	59	65		7	16		
Board(% of Entering)= $\frac{59}{510}=11.6$				Board(% of Entering)= $\frac{7}{174}=4.0$			
Alight(% of Entering)= $\frac{65}{510}=12.7$				Alight(% of Entering)= $\frac{16}{174}=9.2$			

ROYAL STREET A.M. & P.M.				BOURBON A.M. & P.M.			
Bus Stop	Board	Alight	Leaving	Board	Alight	Leaving	
			595				
Esplanade	17	11	601	4	8	300	Direction of Travel
Ursulines	17	7	611	1	10	304	
Dumaine	22	10	623	6	17	313	
St. Peter	14	14	623	8	24	324	
St. Louis	10	20	613	2	31	340	
Bienville	6	20	599	2	1	369	
Canal						368	
Totals	86	82		23	91		
Board(% of Entering)= $\frac{86}{595}=14.5$				Board(% of Entering)= $\frac{23}{368}=6.3$			
Alight(% of Entering)= $\frac{82}{595}=13.8$				Alight(% of Entering)= $\frac{91}{368}=24.7$			

Royal Street Pass. Boarding & Alighting (% of all pass.) = $\frac{168}{763} = 22.0$

Bourbon Street Pass. Boarding & Alighting (% of all pass.) = $\frac{114}{482} = 23.7$

ESPLANADE BUS LINE - AM & PM

DAUPHINE STREET				BURGUNDY STREET			
Bus Stop	Board	Alight	Leaving	Board	Alight	Leaving	
			268				
Esplanade	16	9	275	6	3	120	Direction of Travel
Ursulines	13	4	284	2	2	117	
Dumaine	13	6	291	1	1	117	
St. Ann		No Stop		1	0	117	
St. Peter	6	5	292	4	1	116	
St. Louis	2	10	284	1	3	113	
Bienville	9	22	271	2	0	115	
Canal						113	
Total	59	56		17	10		

$$\% \text{ Board (\% of Entering)} = \frac{59}{268} = 22.0$$

$$\% \text{ Board (\% of Entering)} = \frac{17}{113} = 15.0$$

$$\% \text{ Alight (\% of Entering)} = \frac{56}{268} = 20.9$$

$$\% \text{ Alight (\% of Entering)} = \frac{10}{113} = 8.8$$

CITY PARK BUS LINE - AM & PM

DAUPHINE STREET				BURGUNDY STREET			
Bus Stop	Board	Alight	Leaving	Board	Alight	Leaving	
Dumaine							
Rampart				10	7	79	Direction of Travel
Dumaine				1	2	76	
St. Ann			93				
Rampart	2	8	99	1	2	77	
St. Ann	0	0	99	1	1	78	
St. Peter	6	4	101	1	0	78	
St. Louis	2	3	100	2	0	77	
Bienville	4	12	92			75	
Canal							
Totals	14	27		16	12		

$$\% \text{ Board} = \frac{14}{93} = 15.1$$

$$\% \text{ Board} = \frac{16}{75} = 21.3$$

$$\% \text{ Alight} = \frac{27}{93} = 29.0$$

$$\% \text{ Alight} = \frac{12}{75} = 16.0$$

Totals for Vieux Carre - All Lines

Entering	1512
Board	215
Alight	<u>278</u>
Total	2005

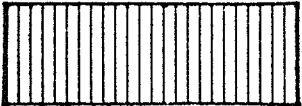
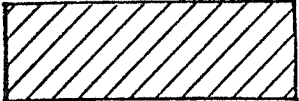
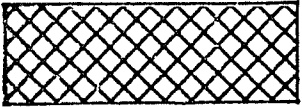

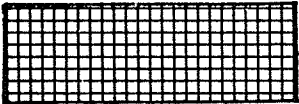
$$\% \text{ Board} = \frac{215}{1512} = 14.2\%$$

$$\% \text{ Alight} = \frac{278}{1512} = 18.4\%$$

$$\begin{aligned} \% \text{ Passenger Board of Alight (\% of Total)} \\ = \frac{493}{2005} = 24.6\% \end{aligned}$$

APPENDIX B

LEGEND

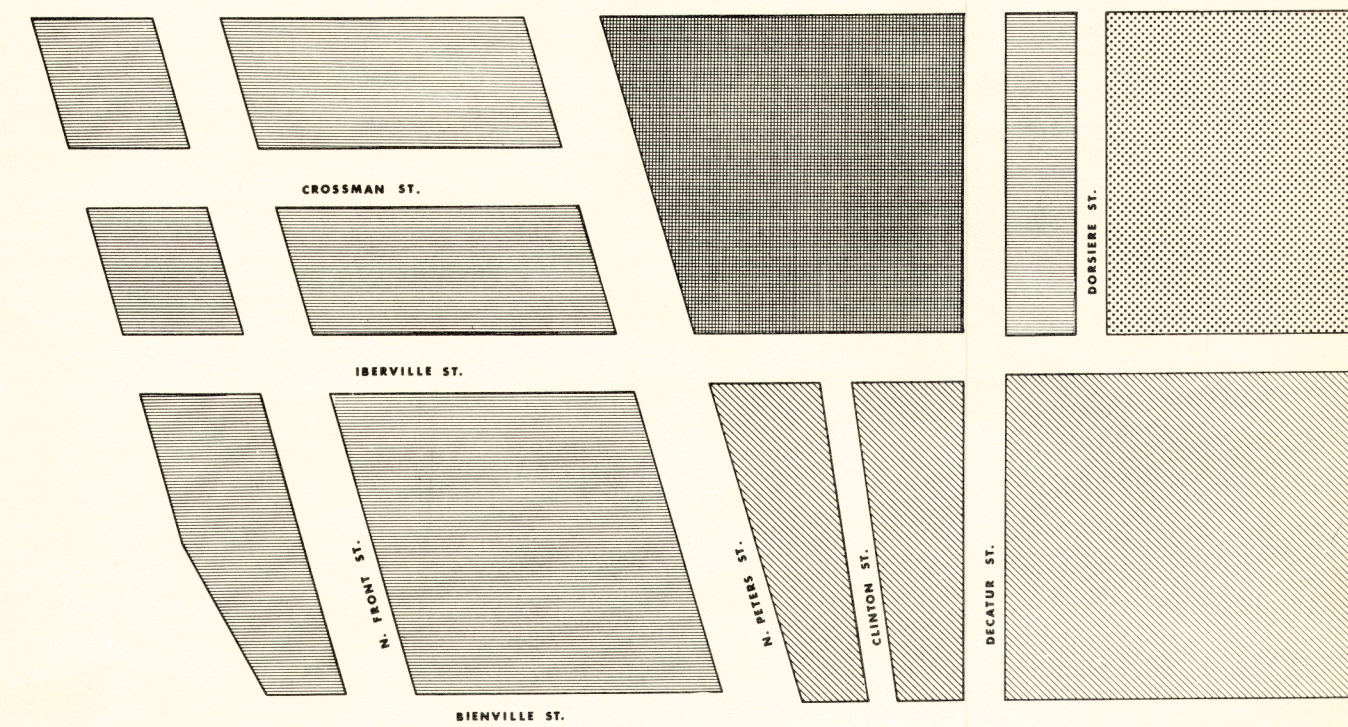
RED	-		Property on which the uses and structures are obsolete and redevelopment could take place immediately.
GREEN	-		Property on which either the uses are appropriate but the buildings are obsolete or the uses are inappropriate but the buildings are sound.
BLUE	-		Property which has been developed for a long period of time and will continue to be functional throughout the foreseeable future.
YELLOW	-		Property on which development is in progress or has just been completed.
BROWN	-		Property which has historic or other special significance.

LEGEND FOR FIGURES 4 THROUGH 7

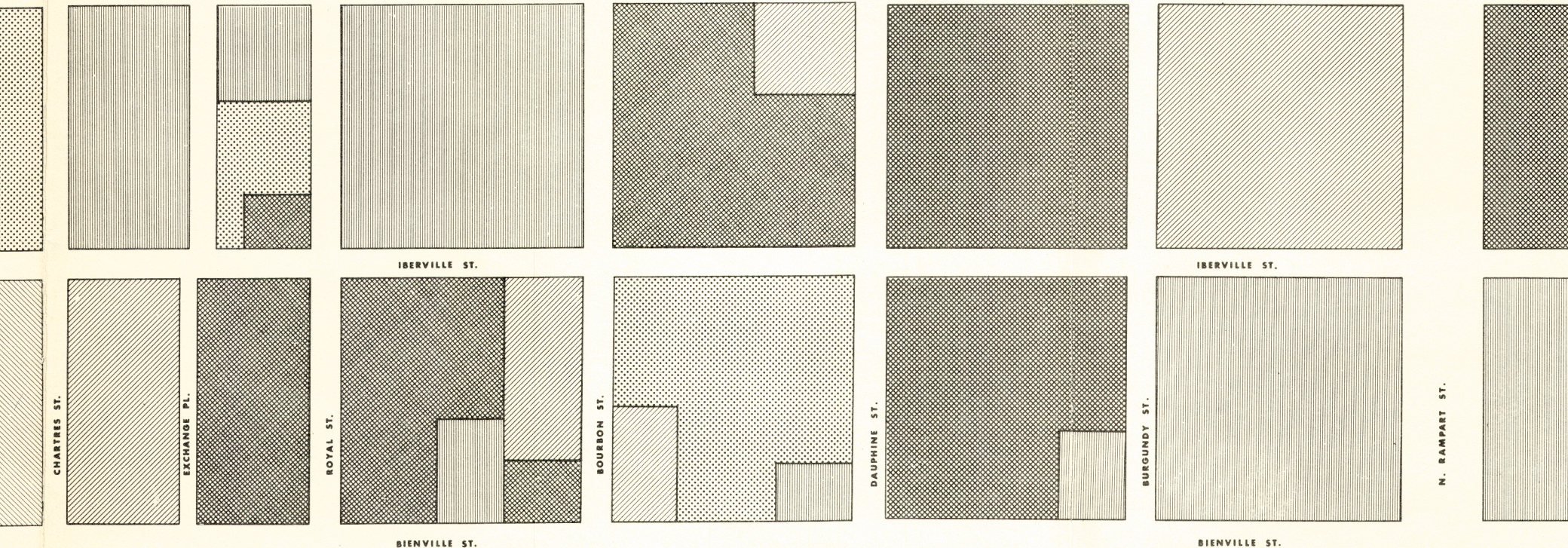
FIGURE NO. 3

The diagrams illustrate the step-by-step construction of a city block. Each diagram shows a new lot or street section being added to the previous configuration. The streets shown are COMMON ST., MARLIE ST., ST. CHARLES ST., CARONDEL ST., BARONDEL ST., UNIVERSITY PLACE, and S. RAMPART ST. The diagrams are numbered 1 through 10, showing the progression from a single lot to a fully developed block.

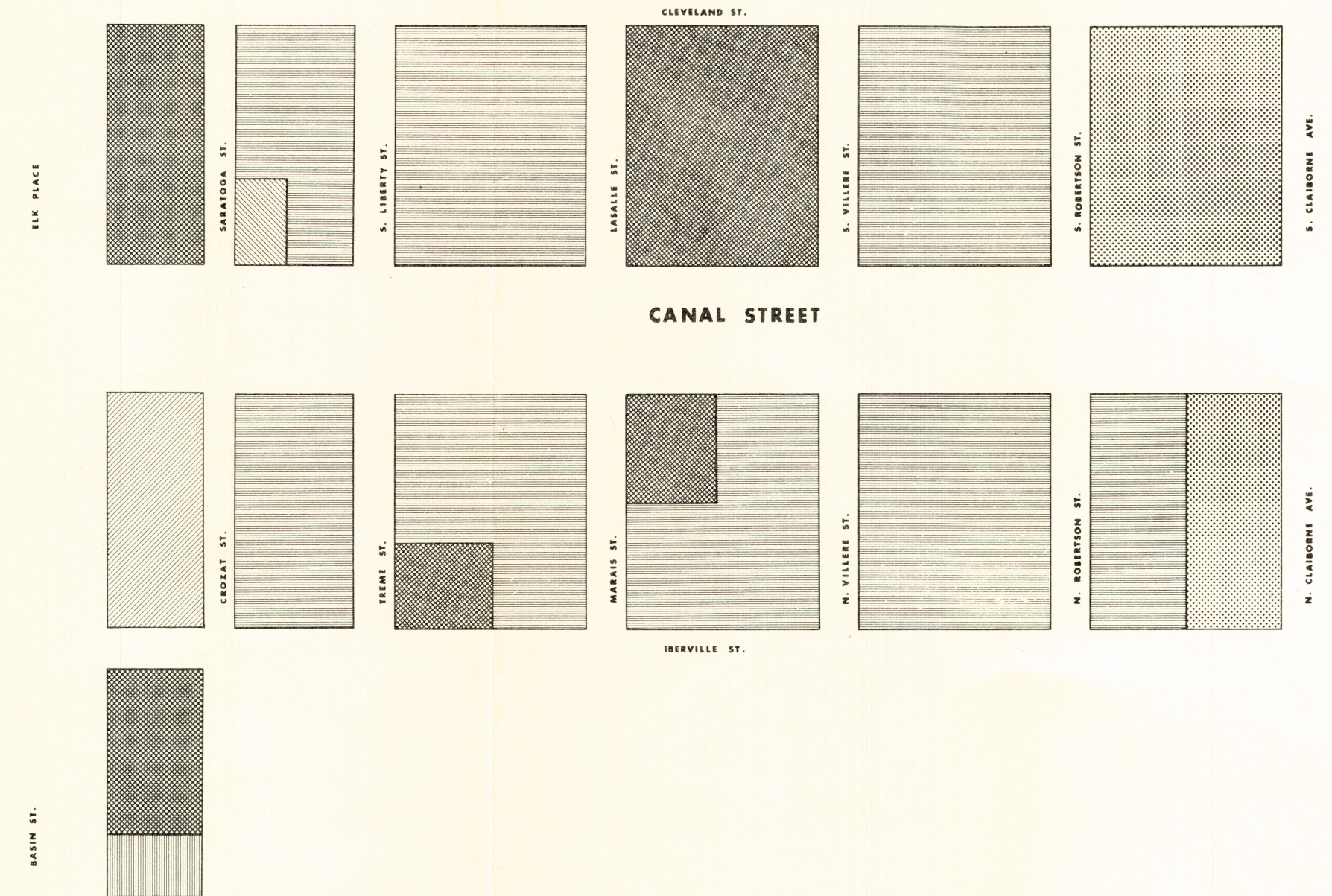
CANAL STREET



DEVELOPMENT STATUS
N. FRONT ST. TO CAMP-CHARTRES STS.
FIGURE NO. 4



DEVELOPMENT STATUS
CAMP-CHARTRES STS. TO BARONNE-DAUPHINE STS.
FIGURE NO. 5



DEVELOPMENT STATUS
SARATOGA-CROZAT STS. TO CLAIBORNE AVE.
FIGURE NO. 7